Factors Influencing the Acceptance of Online Product Reviews:

A Study of the Indian eCommerce Industry

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I hereby declare that the research work embodied in the present thesis entitled **Factors Influencing the Acceptance of Online Product Reviews: A Study of the Indian eCommerce Industry** is the outcome of my own efforts except for the guidance received from the Thesis Advisory Committee and the references to the earlier works that have been duly acknowledged. I further declare that this work has not been submitted to this University or any other university for any other exam.

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This is to certify that the Thesis entitled **Factors Influencing the Acceptance of Online Product Reviews: A Study of the Indian eCommerce Industry** embodies the work of the candidate himself/ herself. The candidate has worked under our guidance and in our opinion, the Thesis fulfils the requirements of SVKM's NMIMS University, Mumbai relating to Degree of Ph. D. (Management Studies).

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Abstract

Ecommerce today is a significant channel for sales for most products. One very important advantage of ecommerce over the traditional mediums is its support for bidirectional communication. Online word of mouth is growing in importance as customers, as well as organizations realize its effectiveness in appeal, persuasiveness and in being a candid source of information and feedback. They are an exemplification of 'peer production systems through which a community of users pool their resources to produce high rated information goods and information embedded goods, sometimes altogether replacing the traditional mechanisms of firms and markets.

Studies confirm that ~80% [1]of online shoppers said they consult reviews prior to purchase, 79%[2] consumers trust online reviews as much as personal recommendations and 82%[3] customers say purchase decisions have been directly influenced by the reviews. As with the traditional WOM, numerous studies have shown that electronic Word of Mouth (eWOM) has a significant impact on consumer's decision-making process, their satisfaction with goods and services, and the overall value of online economic transactions.

Though there are studies around how eWOM affects the trust in the product and the purchase decision, there is a significant research gap around how the eWOM system affects review acceptance. Given the abundance of consumer-generated feedback and the consumer dependence on using it as a purchase decision influencer, it becomes very important to understand how consumers analyze the eWOM to accept it as a part of their purchase process. Additionally, how does this changes across product types and consumer characteristics is critical to understand.

This research examines the factors influencing the acceptance of online product reviews along with the moderating effect of product type & consumer characteristics. A proposed research model is developed using the Elaboration Likelihood Model (ELM) & Moderated Model of Information Adoption (IAMM). A 2^5 full factorial experiment was designed to test the hypothesis. The results found that all the central route variables are critical and affect Information Usefulness Leading to Acceptance whereas the peripheral route variables did not emerge significant. Moderating Effects of product type, prior knowledge & purchase decision involvement were found.

[1] *Nielsen Company 2018*
[2] *BrightLocal 2017*
[3] *Dimensional Research, 2016*

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List of Abbreviations

OPR – Online Product Reviews

WOM – Word of mouth

eWOM – Electronic Word of mouth

ELM – Elaboration likelihood model

IAMM - Moderated Model of Information Adoption

NIC – Need Information Congruence

AQ – Argument Quality

IR – Immersive Review

SC – Source Credibility

SE – Source Expertise

ID – Information Diagnosticity

IU – Information Usefulness

RA – Review Acceptance

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CHAPTER 1: INTRODUCTION

1.1 Background of The Research

The number of people using the internet has surged over the past year, with more than one million people coming online for the first time each day since January 2018. There are **4.39 billion** internet users in January 2019, an increase of 366 million (9 percent) versus January 2018. We are adding 11 new users every second.

Global ecommerce consumers grew by 3% over the past 12 months to stand at **2.8bn** and contribute to **a $1.8 Trillion** consumer goods ecommerce market (this grew 14% YOY).

India is the fastest growing market for ecommerce sector. Indian **eCommerce consumers are 360 million** as of January 2019 – This is equal to the population of USA. We have added **184 million new consumers** over the last year – more than the population of Bangladesh (growth of 11% YOY). Revenue from this sector has increased from **US$20 billion in 2017 to US$22.14 billion in 2018 a growth of 23% YOY**, the highest in the world.

The continuous, rapid growth of online retailing implies that e-commerce has become a common medium for businesses to generate revenue. The ongoing digital transformation in the country is expected to increase India's total internet user base to 600 million by 2021. India's internet economy is expected to grow to US$ 250 billion by 2020, majorly backed by ecommerce.[4]

Ecommerce today is a significant channel for sales for most products. National and International brands have embraced this channel and are making heavy investments in supply chain capabilities, warehousing and technology development, adding to the overall ecosystem to facilitate growth in the ecommerce industry on the whole. Ecommerce industry in India witnessed 21 private equity and venture capital deals worth US$ 2.1 billion in 2017 and 40 deals worth US$ 1,129 million in 2018. According to EY, E-commerce and consumer internet companies in India received more than US$ 7 billion in private equity and venture capital in 2018[5].

Along with the growth of e-commerce, advances in information and communication technologies (ICTs) have enabled online retailers to provide new services to enhance customer value and to increase sales. Examples of these services or technologies include online recommendation systems through personalization, virtual reality, and/or consumer feedback mechanisms that serve to reduce consumer search costs and uncertainty or risks associated with the purchase of unfamiliar products.

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[4] *STATISTA DIGITAL MARKET OUTLOOK, E-COMMERCE INDUSTRY, 2018,2019*
[5] *IBEF.org*

The growth of ecommerce has benefited the brands greatly since they can reduce setup and overhead costs and pass on the benefits to the customer along with the inherent benefits of the ecommerce model such as convenience, time savings, comparison shopping, etc.

This also means that the way the customer shops online has become a critical factor to be studied. As the ecommerce model does not allow the customer to "touch and feel" the product, the customer has started depending on a lot of other factors, to conclude about the ones that he cannot decipher and to aid his purchase decision, out of which **online product reviews** are a very important one. Online product reviews have made it possible for customers to share their product/service experience with each other and thus facilitate an informed purchase decision.

1.2 Word of Mouth (WOM)

The importance of Word of Mouth (henceforth referred to as WOM) has long been a topic of interest for both academics and practitioners. Word-of-mouth (WOM) is acknowledged to be a powerful force in the consumer marketplace (Hutton & Mulhern, 2002; Katz & Lazarsfeld, 1955; Silverman, 1997; Whyte, 1954)). Historically, WOM has constituted a face-to-face conversation between consumers about a product or a service experience. As an unpaid endorsement for products or services, WOM can be the most believable form of advertising for marketers. Traditionally, WOM has always been considered an important social process that could determine new product diffusion (Mahajan & Peterson, 1985), customer decision making process (Price & Feick, 1984); (Richins, 1983), satisfaction and loyalty (Srinivasan, Anderson, & Ponnavolu, 2002). Researchers have concurred upon the fact that WOM is sometimes more effective than traditional marketing tools such as advertising and personal selling.

However, WOM is gaining a new significance due to the Internet. The introduction of internet technologies in recent years has transformed the traditional WOM into a new and more dynamic form - the electronic word-of-mouth or eWOM.

1.3 eWOM

With the advent of the Internet, a less personal but more ubiquitous form of WOM, viz. eWOM has come into vogue (Bickart Barbara ; Schindler, 2001; Chen, Fay, & Wang, 2002; Godes & Mayzlin, 2004; Hennig-thurau et al., 2016). eWOM is defined as "*any positive or negative statement made by potential, actual, or former*

customers about a product or company, which is made available to a multitude of people and institutions via the Internet" (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004).

One very important advantage of the internet over the traditional mediums is its support for bidirectional communication. It not only enables organizations to reach out to consumers in a large scale at a low cost but also allows for the consumers to reach out with feedback/reviews to the organization as well as to the wider community of users who are considering a decision making. Online word of mouth is growing in importance as customers as well as organizations realize its effectiveness in appeal, persuasiveness and being a candid source of information and feedback. Previously when customers needed information about a product or service they would have to turn to marketer generated information – advertisements, brochures or third party product certifications, or friends and relatives. Whereas in today's scenario, online product reviews have surpassed all the above and made it possible for customers to share their product/service experience with each other and thus facilitate an informed purchase decision.

In eWOM, consumers need only interact with their computers to post their product reviews. Their opinions are widely and easily accessible to other consumers but are only disseminated when other consumers—presumably searching for information on the type of products reviewed— access them.

Recognizing the significant value of eWOM as a source of information and thus website trust for potential customers, marketers enable and encourage consumers to post product reviews and opinions on their eCommerce websites (Bart, 2005; Mayzlin, 2001; Peterson & Yang, 2003; Tedeschi Bob, 1999). For e.g. A consumer looking for a book at Amazon.in, for example, is offered not only the editorial review typically printed on the book's cover jacket but also ratings and comments by fellow consumers who have read the book. eCommerce companies have a major part of their budgets focused towards acquiring, maintaining & managing online reviews since they believes that its consumers trust other consumers' opinions more than they do traditional advertising and that such eWOM is thus more effective in influencing consumer behavior (Thompson, 2003). Amazon and other popular Web retailers, e.g., Flipkart.com, actively seek consumer opinions by sending buyers reminder emails asking them to post reviews about products they had bought, if the buyer had not already posted a review on their own. Although books may have been one of the first categories to inspire consumer reviews on the Web, eWOM now includes a wide variety of consumer product categories. Web sites such as epinions.com, mouthshut.com, consumersearch.com, and dooyoo.co.uk dedicate themselves to eWOM across a wide variety of product categories.

1.4 Online Product Reviews (OPR)

There are many methods to eWOM – online communities, product review system, viral messages, feedback systems, social media messages. These systems provide an effective platform for customers to share their experience and to rate the product as well as the service provider. Ecommerce companies (Amazon, Flipkart, Jabong, Snapdeal, FirstCry) nowadays provide an online product review for every product on their website to aid the decision-making process of a new buyer. They are an exemplification of 'peer production systems' (Benkler, 2006) through which a community of users pool their resources to produce high rated information goods and information embedded goods, sometimes altogether replacing the traditional mechanisms of firms and markets.

1.5 Past Research

eWOM and its growing importance has encouraged increasing amounts of research around it in the recent past. Previous eWOM studies focus mainly on their impact on trust building between exchange partners (Ba & Pavlou, 2002; Gefen & Pavlou, 2004), on box office revenue (Y. Liu, 2006; Reinstein, David A. Snyder, 2005), and overall sales (Chevalier & Mayzlin, 2006a); (Godes & Mayzlin, 2004). Additionally, there have been studies to show that online feedback systems not only lead to price premiums but also affect the buyer's trust in seller's credibility depending on the positive or negative ratings the seller has (Ba & Pavlou, 2002). Research on valence showed that negative ratings have greater impacts on shaping buyers' trust than positive ones (Ba & Pavlou, 2002; D. Park, Lee, & Han, 2007). Previous research also shows that eWOM has significant positive effects on books sales (Chevalier & Mayzlin, 2006a), box office revenue (Y. Liu, 2006), and craft beer sales (Clemons, Gao, & Hitt, 2006). There has been recent research around social shopping (A. Wang, Zhang, & Hann, 2018), self-selection bias (Hu, Pavlou, & Zang, 2017) and product ratings as an indication of quality (Langhe, Fernbach, & Lichtenstein, 2016).

As can be seen above, most of the research around eWOM is around the output metrics or the factors that constitute the eWOM. There is a paucity of research which examines the influence of eWOMS on consumer behavior. Considering that eWOM has the potential to help consumers develop an in-depth understanding of products and services, help them create consideration sets, and eventually make consumption decisions. However, systematic investigation on how consumers process product information from eWOMS to arrive at a decision has been scarce.

How WOM changes consumer attitude towards purchasing decisions is worthy of investigation. WOM adoption is considered an effective measure for consumers' acceptance of communicator opinions (R. Zhang & Tran, 2011). Acceptance refers to WOM persuasiveness, in addition to the degree that consumers are likely to rely on WOM in purchasing decisions (De Maeyer, 2012).

1.6 Objective of The Research

Studies confirm that ~80% [6]of online shoppers said they consult reviews prior to purchase, 79%[7] consumers trust online reviews as much as personal recommendations and 82%[8] customers say purchase decisions have been directly influenced by the reviews.

As with the traditional WOM, numerous studies have shown that these systems have a significant impact on consumer's decision-making process, their satisfaction with goods and services, and the overall value of online economic transactions (Balasubramanian, Sridhar; Mahajan, 2001; Hennig-thurau et al., 2016).

Though there are studies around how eWOM affects the trust in the product and the purchase decision, there is a significant research gap around how the eWOM system affects review acceptance. Review acceptance indicates that the reviews helped the consumer arrive at a decision regarding the product purchase which could be positive or negative. Even if a review helps the consumer decide against the purchase or lets him make the purchase while knowing about drawbacks of the product, it would be considered 'acceptance'. Thus, the current research does not study 'purchase intent' but 'review acceptance'.

In this research, the primary focus will be on the online Product Reviews (OPR), and more specifically product reviews found on ecommerce websites in the Indian context.

The objective of this research is to examine how the OPR's information and informant characteristics affect consumer's acceptance of OPRs recommendations for different product types and consumer characteristics.

[6] The Nelson Company 2018
[7] BrightLocal 2017
[8] *Dimensional Research, 2016*

1.7 Significance of The Research

Theoretically, this study fills the current knowledge deficiency regarding the consumer's processing and usage of information and recommendation from OPRs. It also enhances the word-of-mouth literature by contributing new insights on electronic word-of-mouth.

This research tries to build a framework to analyze "acceptance" of reviews by creating a model built upon existing models – IAMM* & ELM**. Such a model will help to understand the acceptance of eWOM in the context of online product reviews on ecommerce sites. This understanding will further help marketers and sellers know the critical information levers that affect buyer decision making across central and peripheral cues in addition to their variance by the product type being considered. This research is expected to shed new light on the area of online product reviews. (IAMM - Moderated Model of Information Adoption) (ELM - Elaboration Likelihood Model).

CHAPTER 2: REVIEW OF LITERATURE

2.1 Introduction to Word of Mouth (WOM)

Word of Mouth is defined as the act of exchanging marketing information among consumers (Grewal, Cline, & Anthony, 2003). WOM is typically characterized as oral, person-to-person communication between a receiver and a communicator in which the communicator delivers a non-commercial (Arndt, 1967; Rogers, 1995). WOM is consistently acknowledged as an important source of information that influences consumer product choices (Engel, Kollat, & Blackwell, 1968; Herr, Kardes, & Kim, 1991a; James, Elihu, & Menzel Herbert, 1966; Smith, Menon, & Sivakumar, 2005; Witt Robert & Bruce Grady, 1972). Consumers frequently use WOM when they seek information about brands, products, services (Buttle, 1998; East, Hammond, & Lomax, 2008). In spite of the fact that marketer-generated information and business sources play a significant role in developing consumer interest in commercial products, WOM is the most powerful source of information impacting consumers' actual adoption of innovations and new products (Engel, Kegerreis, & Blackwell, 1969; Gilly & Yale, 1998; James et al., 1966; Katz & Lazarsfeld, 1955). For the reason that personal sources are normally perceived as more credible than marketers or commercial sources, WOM is often more effective than traditional mass media or advertising in changing consumers' attitudes and (East et al., 2008; Robert, 1957). Previous studies found that WOM influences consumer choice more than print ads, personal selling, and radio advertising does (Engel et al., 1969; Herr et al., 1991a; Katz & Lazarsfeld, 1955). It would not be incorrect to say that, consumer-initiated WOM is seen as more objective and reliable than marketer-generated information and is able to confirm and/or strengthen opinions stimulated through various communications (Engel et al., 1969). What is of greater significance is that WOM communication is bidirectional and interactive and is generally operated by two parties: opinion leaders and opinion seekers (Gilly & Yale, 1998). Conceptually, opinion leaders are the information generators or providers in WOM communications. Opinion leaders turn into information transmitters who then pass on the information from mass media to their peers and influence their opinions and choices often related to products or services (Burt, 1999; Lazarsfeld, Berelson, & Gaudet, 1944; Price & Feick, 1984; Watts & Dodds, 2007). On the other hand, opinion seekers are those who desire to obtain information or opinions from others that help them evaluate products and services for their purchases (Higie, Lawrence, & Price, 1987); (Flynn, Goldsmith, & Eastman, 1996). A person's inclination to influence attitude and overt behavior of others is termed opinion leadership. Opinion leadership is considered to be related to the individual's ability and motivation to share (Everett & Bhowmik, 1970; Flynn et al., 1996; King & Summers, 1970; Ruvio & Shoham, 2008). On the other hand, opinion seeking is the behavioral counterpart to opinion leadership and occurs when an individual seeks advice and information from a friend, family member, or colleague who is often considered an opinion leader on the subject of interest (Goldsmith & Clark,

2008; Ruvio & Shoham, 2008). In summary, opinion leadership and opinion seeking are two important aspects of information exchange that drive WOM communication within the domain of consumer behavior.

2.2 Effects of Word of Mouth

Prior research has established that sources play a significant influential role not only in affecting consumers' product choices and purchase decisions (Price & Feick, 1984; Whyte, 1954), and influencing the new product diffusion processes (e.g., (Arndt, 1967; e.g. Engel et al., 1969; Goldenberg, Libai, & Muller, 2001; Robert, 1957; Spencer & Feldman, 1965). Sources have a role in shaping consumers' pre-usage attitudes (Herr et al., 1991a) and post-usage evaluations of a product or service (Bone, 1995). For example, Whyte (1954) found an extensive and powerful social network of neighbor's exchange product information in contexts such as "the clothesline" and "backyard fences." Katz & Lazarsfeld (1955) seminal work presented evidence that WOM is the most important factor influencing the purchase of household goods and food products. Subsequent investigations of the WOM phenomenon revealed that consumers rely on WOM to select physicians (Spencer & Feldman, 1965), automotive diagnostic centers (Engel et al., 1969), and services (Mangold, Miller, & Brockway, 1999). Further, Arndt (1967) presented that consumers who received positive WOM about a new food product are more likely to purchase it compared to those who received negative WOM. This finding is consistent with Rogers (1995) study indicating that WOM is a major determinant of the adoption of new products or services and as the main factor influencing the speed of innovation diffusion (Mahajan, Muller, & Srivastava, 1990; Rogers, 1995). In sum, an interactive, dynamic WOM communication is a powerful force in influencing consumers' attitudes and behaviors (Jacqueline Brown & Reingen, 1987). However, the unique properties of information technologies and the advent of the Internet have jointly brought about a WOM revolution (Dellarocas, 2003; Thorson & Rodgers, 2006). As more consumers use online communications as a channel for interpersonal communications and new media technologies continue to evolve, the nature and effect of WOM taking place within online environments has gained rising attention from researchers in recent years.

2.3 Electronic Word of Mouth (eWOM)

The emergence of the Internet has enabled consumers to interact with one another quickly and conveniently and has established the phenomenon known as online interpersonal influence or electronic word-of-mouth (eWOM) (Jo Brown, Broderick, & Lee, 2007; Dellarocas, 2003; Dwyer, 2007; Goldenberg et al., 2001; Goldsmith & Horowitz, 2006). Hennig-Thurau (2004) defined eWOM as "any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet". In this study, eWOM is defined as "the act of exchanging

marketing information among consumers online." eWOM can take place via many different online channels, such as e-mails, discussion forums, instant messaging (IM), homepages, blogs (e.g., Blogger), product review sites (e.g., Amazon.com and Epinions.com), online communities, newsgroups, chat rooms, and social networking sites (e.g., Facebook and MySpace) (Goldsmith & Horowitz, 2006; Vilpponen, Winter, & Sundqvist, 2006). The anonymous and interactive nature of cyberspace enables consumers to freely give and seek opinions about the product experiences of peer consumers who are unknown to them, thereby affecting consumers' brand choices and sales of many goods and services (Goldsmith & Horowitz, 2006; Schlosser, 2005). Moreover, the transmission of information on the Internet gives consumers unlimited access to a great amount of information and a variety of product and brand choices (Negroponte & Maes, 1996). In the online world, consumers have the ability to make comparisons on price and quality of brands or services and possess the opportunity to communicate with marketers as well as with other consumers (Negroponte & Maes, 1996). As a result, it has become apparent that consumers use the Internet to exchange product-related information and share brand experience in the same way they do offline (Goldsmith & Horowitz, 2006). From a managerial standpoint, eWOM is recognized as an important marketing technique in brand communications. According to Goldsmith and Horowitz (2006), online interpersonal influence or eWOM plays an important role in today's e-commerce. Marketers become more interested in emanating the power of eWOM in building brands and developing brand loyalty programs. The personalization features such as customized information of the Internet also provide opportunities for marketers to implement eWOM as their communication strategies to establish and manage customer relationships (Dellarocas, 2003). Viral marketing, which relies on provocative messages to stimulate unpaid peer-to-peer communication of marketing information from identified sponsors, evidently illustrates marketers' attempt to actively capitalize on eWOM as a marketing tool (Porter and Golan 2006). Thus, many companies now invest substantial efforts to encourage positive eWOM communications and accelerate its distribution (Goldenberg et al., 2001; Schwartz, 1998), and ultimately incorporate eWOM-based "viral marketing" or "buzz marketing" as part of integrated marketing communications strategies (Godes & Mayzlin, 2004).

2.4 Effects of eWOM

With the growth and development of information and communication technologies, research on eWOM has emerged in recent years. For example, Dellarocas (2003) examined online feedback mechanisms (i.e., eBay) and found that such an online medium where buyers and sellers can meet is an important communication channel for building consumer trust and cooperation in these virtual communities (Fong & Burton, 2006). Dellarocas' (2003) study indicates that the growingly prevalent eWOM within online feedback mechanisms has valuable implications for brand building, customer relationship management, and product development.

As virtual communities provide consumers with a convenient channel to establish relationships, exchange product information, and develop e-commerce, these communities have become a good source of eWOM for both consumers and marketers (Hagel & Armstrong, 1997). Similarly, Senecal and Nantel (2004) examined the influence of online product recommendations on consumers' product choice. Findings from their experiments showed that subjects who consulted product recommendations selected the recommended products twice as often as subjects who did not consult any recommendations, which again indicates the influential power of eWOM and online product recommendations on consumers' product-related decisions. Other studies have contributed to the understanding of eWOM by examining the effects of eWOM on product success (e.g., sales) (Chevalier & Mayzlin, 2006a; Godes & Mayzlin, 2004), factors that motivate consumers to articulate themselves via consumer-opinion platforms (Hennig-Thurau et al., 2004), consumer responses and motivation to pass-along emails, the effect of eWOM on online survey procedures (Norman & Russel, 2006) and on virtual consumer communities (Hung & Li, 2007), and the effects of a political candidate's blog on attitudes toward the website, attitudes toward the political candidate, and intentions to vote (Thorson & Rodgers, 2006). Chevalier and Mayzlin (2006a) for example, examined the effect of WOM regarding consumer reviews on sales patterns at Amazon.com and Barnesandnoble.com. The authors found that positive reviews about books led to an increase in relative sales at that site. A study has examined the influence of electronic referrals at different stages of the viral marketing recipients' decision-making process (De Bruyn & Lilien, 2008). Specifically, this study investigated how the WOM communication process influences consumers' purchase behaviors in an online environment. They developed a model to identify the different roles WOM plays at each stage of the decision-making process and found that characteristics of the social tie, tie strength, and perceptual affinity had positive influences on recipients' WOM behaviors, awareness and interest, whereas demographic similarity had a negative influence on such behavior at each stage of the decision-making process.

As academic interest in online interpersonal communications or eWOM increases, an interesting question arises: is computer-mediated WOM different from traditional face-to-face WOM? Understanding differences between traditional WOM and emerging eWOM in a cluttered cyberspace could help researchers explicitly conceptualize and measure online interpersonal communication developed within the new medium. There have been some studies in the recent years around average user ratings and their influence on sales across product categories & industries (Chevalier & Mayzlin, 2006a; Chintagunta & Gopinath, Shyam Venkataraman, 2010; Loechner, 2013; Luca, 2011; Moe & Trusov, 2011). Product ratings seem to provide an almost perfect indication of product quality with little search costs (R. Lynch, 2015; Simonson, 2014; Simonson & Rosen, 2014). There is a contrarian view that validates the disconnect between the objective quality information that online user ratings actually convey and the extent to which consumers trust them as indicators of objective quality (Langhe et al., 2016). Social shopping is picking up to be a great influencer. Social-networking

functions are increasingly embedded in online rating systems. These functions alter the rating context in which consumer ratings are generated. Wang et al (2018) investigate online friends' social influence in online book ratings. The self-selection bias in online product reviews has been explored (Hu, Pavlou, & Zhang, 2009).

2.5 Factors affecting eWOM

There has been quite a lot of research to examine the factors that affect eWOM.

1. Supply side: Factors that drive people to contribute to the online reviews/What drives these online WOM platforms to sustain

- Rensink (2013)
- Ha and Wagner (2013)
- Wang 2010
- Lafky (2010)
- Yoo (2008)
- Reinstein, David A. Snyder (2005)
- Dholakia et al. (2004)
- Dellaracos (2003)
- Wang and Fesenmaier (2003)

2. Demand Side: What drives people to consume/trust online reviews

- Roy et all (2018)
- Motyka et all (2018)
- Shen, Zhang, & Zhao (2016)
- De Langhe et al. (2015)
- Park (2015)
- Sen and Lerman (2007)
- Pavlou and Dimoka (2006)
- Dhabolkar (2006)
- Poston and Speir (2005)
- Smith et al. (2005)
- Chevalier and Mayzlin (2005)
- Ba (2001)

3. Impact Side: What is the power and impact of online reviews

- A. Wang et al., (2018)
- Anand et all., (2017)
- Goh, Heng, & Lin (2013)
- Sallam & Wahid, (2012)
- Li & Zhan (2011)
- Cheung et al.(2009)
- Pavlou and Dimoka (2006)
- Chevalier and Mayzlin (2006)
- McKnight & Kacmar (2006)
- Ba and Pavlou (2002)

4. Review System: What characteristics of the online reviews affect attitudes around online reviews

- Yoon et all, 2019
- Watson et all, 2018
- Laer et all, 2018
- Hu et al., (2017)
- Filieri 2014
- Hu et al., (2009)
- De Bruyn & Lilien, (2008)
- Zhang andWatts (2008)
- Zhang and Watts (2008)
- Goldsmith & Horowitz (2006)
- Chatterjee (2001); Schindler & Bickart, (2005)
- Senecal and Nantel (2004)
- Dellarocas (2003)
- Buda and Zhang (2000)

The current research falls in the 2 right hand side quadrants that is the demand side and the review system. There have been some interesting studies in recent times covering these - Actual and Perceived Validity of Online User Ratings (Langhe et al., 2016), opinion leadership and review helpfulness (Zhu, Yin, & He, 2014), valence and purchase intention (Roy, Datta, & Mukherjee, 2018), review attributes (Watson, 2018), review credibility & adoption factors (Lis, 2013), acceptance leading to purchase intention (Fan & Miao, 2012) type of review information – informative vs normative (Filieri, 2014), linguistic vs narrative (Laer & Hende, 2018), subjectivity (S. Liu, Ozanne, & Mattila, 2014).

Further analysis of literature was conducted to explicate factors of interest.

2.5.1 Argument Quality

Argument quality refers to the strength or quality of the received information. It is the degree to which the receiver sees the argument as well founded and convincing in expressing a certain opinion (Iduozee, 2015). A lot of studies have shown that argument strength affects the attitude of the receiver. This effect has been shown to be stronger in virtual environments. Strong arguments create positive attitudes towards the information and thus increase its credibility. On the contrary, invalid arguments found in the received information from negative attitudes towards the information and naturally indicate that it is not credible (Iduozee, 2015). Argument quality has been demonstrated to be crucial in evaluating communications. Therefore, it can be said that readers also judge the credibility of eWOM messages according to how strong their arguments are (Cheung, Lee, & Rabjohn, 2013). Research showed that negative cues attract more attention since fwe are primarily used to a social environment full of positive cues. Surprisingly, some negativity may even increase the credibility of the review. This is referred to as a negative bias, where negative information is more striking than positive information due to its rare nature (Fiske, 1980).

2.5.2 Need Information Congruence

Need information congruence is defined as "The extent to which the product review in the eWOM system addresses the consumer's personal consumption needs". *NIC has been studied as an antecedent to Information Diagnosticity* (X. Wang, 2007b, 2015; Yoon, 2008). Personal needs shape many aspects of consumption behavior (Stanton & Lowenhar, 1974), including product information searching. Prior to considering a product and searching for relevant information, consumers tend to develop cognitive structures for product evaluation that arise from their personal consumption needs. During product evaluation, these cognitive structures are activated, and consumers relate them to product information and focus on the performance of a product in the areas that pertain to their needs. If product information regarding their needs is available, they would be able to evaluate whether the product meets their needs. Thus, the product information is perceived to be diagnostic, persuasive, and unambiguous. On the contrary, information diagnosticity is low if product information cannot allow consumers to evaluate the product's attributes that they are concerned about. Non-diagnostic product information would cause consumers to be unsure about the product's performance and to experience a difficult decision-making process. As diagnosticity assessment is task-specific (Gershoff, Broniarczyk, & West, 2001), a product review that is unable to facilitate the consumer to gain the needed product knowledge would be perceived as non-diagnostic. On the contrary, when the product attributes described in the eWOM review are

congruent with the consumer's consumption needs, the consumer can diagnose the product by reading the review.

2.5.3 Source Expertise

Source expertise can be defined "as the extent to which a person is perceived to possess knowledge, skills or experience and thereby is considered to provide accurate information" (Ohanian, 1990). It refers to the knowledge of a sender on a product or a service. A receiver will probably turn directly to a sender whom he considers knowledgeable and experienced (Gilly & Yale, 1998). He presumes that the sender has substantial and especially useful information due to his high expertise (Voyer & Bansal, 2000). Empirical studies demonstrate that information provided by experts has a great impact on the receiver. (Bone, 1995; Gilly & Yale, 1998), for example, established for classical WOM that in the rating of products the influence on the receiver increases when the WOM originates from a sender with high expertise. In the context of services, (Voyer & Bansal, 2000) and also von (Wangenheim & Bayon, 2004) show a positive correlation between the expertise of the sender and its impact on the receiver. Following the tenor of the source-credibility model, it can be presumed that the sender's expertise also forms a relevant factor in the rating of credibility in online recommendations (Voyer & Bansal, 2000). Thus, receivers choose senders of high expertise as they expect them to provide highly qualified information (Mccracken, 1989). A sender with high expertise appears more useful since the receiver has little cause to doubt the correctness of this information due to the knowledge and the competence of the communicator. This presumption is supported by the theoretical study of Wathen & Burkell (2002). Additionally, experts often possess more power of persuasion. Due to their extensive knowledge and experience, experts should be better able to convince other consumers and thus appear more useful (Wangenheim & Bayon, 2004).

2.5.4 Source Credibility

Source credibility is the ability of a message source to provide accurate, truthful information. Information shared by highly credible sources is more acceptable to people than information provided by a source with low credibility. Thus, the credibility of the source has an effect on how convincing and how persuasive the message is to the reader (Li & Zhan, 2011). To start with, Hovland & Weiss (1951) found that the credibility of a message is influenced by the attractiveness, familiarity, power and physical appearance of the communicator. In an online environment where communication is an exchange of text messages, it is difficult to indicate physical features such as attractiveness (Lim, Sia, Lee, & Benbasat, 2006). Source credibility can be applied to convey the credibility of information by, for instance, the reviewer's reputation in the system. What this

indicates is that consumers need to be able to examine the reviewer's previous posts and ratings made by other members to arrive at a decision to trust a source. Thus, the reviewer's profile is one of the key attributes when evaluating the credibility of messages posted online (C. Cheung & Lee, 2009). Researchers such as Wathen and Burkell (2002) call these physical features "virtual credentials". Thus, in an online setting source credibility is highly determined by the reviewer's identity characteristics. Source credibility is commonly evaluated by how readers have rated the perceived competence and trustworthiness of a source (e.g., (Sussman & Siegal, 2003)). Li & Zhan (2011) claim that existing measures for argument quality and source quality cannot be properly used in analyzing online reviews. When the writer of the message is a user herself, the expressed experience is more personal and comes off as information from a reliable source (Li & Zhan, 2011).

2.5.5 Information Diagnosticity

Information Diagnosticity is defined as the Perceived ability of the communicated product information to predict actual product performance (Kempf & Smith, 1998). This is drawn from the accessibility-diagnosticity model, which describes how product information contributes to consumers' consumption decisions and identifies the important role of information diagnosticity (Herr, Kardes, & Kim, 1991). As per previous research, diagnosticity effect occurs when the consumer feels that the received product information allows for a better judgment of the product and uses the information as an input for product attitude formation (Kempf & Smith, 1998). Empirically, Kempt and Smith (1998), Jiang and Benbasat (2005) and Suh and Lee (2005) explicate the effect of perceived diagnosticity on product learning and consumption decision in product trial process and virtual shopping environments.

ELM suggests that, when one is taking a central route, one's attitude to a communication target is a function of the quality and strength of the persuasion argument associated with the target (Petty & Cacioppo, 1986). In the eWOM context where product reviews serve as the arguments for a product, their quality is mainly reflected in review diagnosticity, which refers to their ability to enable consumers to obtain information pertaining to the characteristics of the product (Qiu, Lin, Ramsay, & Yang, 2012). Thus, we focus on review diagnosticity as the central cue influencing consumers' decision with the product in an eWOM system. Further, we explore what review characteristics could affect a review's diagnosticity. Prior research has revealed that product review content characteristics, such as its depth (number of words), and valence (positive vs. negative), can influence the attitude toward the review (Hu, Liu, & Zhang, 2008; Mudambi & Schuff, 2010; Qiu et al., 2012) However, in the relatively large body of eWOM literature, the effect of whether the contents can address a consumer's consumption needs on his/her evaluation of the review has not been explored. Given consumption is often goal-driven and consumer information search prior to consumption is therefore also driven by the goal,

whether such information seeking goal can be satisfied by the review could determine a consumer's evaluation of the review. Thus, we focus on the congruence between a consumer's consumption needs and product information in the review as the review characteristic influencing Diagnosticity.

2.5.6 Information Usefulness

Information usefulness is a key construct in adoption behavior (Sussman & Siegal, 2003). Drawing on TAM theories, perceived information usefulness refers to an individual's perception that using a new technology will enhance or improve his or her performance (C. Cheung & Lee, 2009). For instance, users of eWOM would consider whether the opinions and information contained in OPRs are useful to help them to make a better buying decision.

2.5.7 Product Categorization

Marketing research suggests that product types can influence how consumers seek product information. In this research, we study the moderating effect of product type on review acceptance characteristics.

Classifications of Product Types

The most notable classification of product types was established by Nelson (1970). Nelson suggested that goods could be classified as possessing either search or experience qualities. Search product is one where the qualities can be determined by prior to purchase, and experience product is one where the qualities cannot be determined prior to purchase. Nelson (1974) further refined search and experience attributes because a product can have both types of attributes as well. Thus, the criteria are which type of attribute is dominant and more important for consumers to consider when making purchase decisions. Search attributes are those features of a product that consumers can assess without actual use of the product, such as size, color, and price. Experience attributes are those that consumers can only assess through actual use of direct contact, such as taste, softness, or fit.

Nelson's product categorization methods have been widely used in research context. Nelson's theory predicts that the information search for experience goods will be characterized by greater reliance on word-of-mouth and advertising (Klein, 1998). He suggests that consumers will undertake less total search time because of the inability to obtain the most valuable product information prior to use and will rely more heavily on product experience of their own or others'.

2.6 Theories Studied

TAM was developed by Davis (1989) who suggested that system use is a response that can be explained or predicted by user motivation, which, in turn, is directly influenced by an external stimulus consisting of the actual features and capabilities of the technology system. Davis suggested that users' motivations could be explained by three factors: perceived ease of use, perceived usefulness and attitude toward using the system. However, TAM focuses more on technology-related usefulness and ease of use of user acceptance, while the essence of UGC is information, not technology.

Further attempts at understanding how people process persuasive information led to the appearance of so-called dual processing models such as Elaboration Likelihood model which distinguishes between central and peripheral processing and Heuristic and Systemic Processing Model (HSM). These models focus on either the message taking the affective route or the cognitive route towards persuasion. The ELM suggests one of the two routes are used to process the information; whereas HSM suggests that both the two routes may be used to process the information.

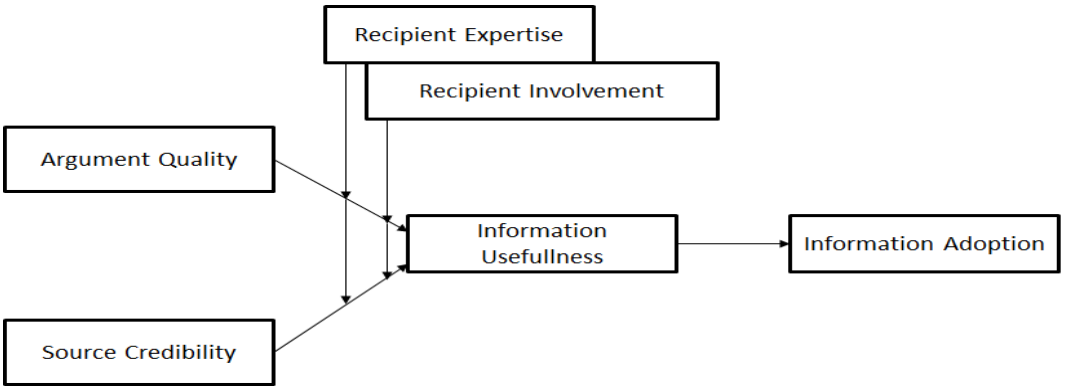
Accessibility–diagnosticity framework (Feldman & Lynch, 1998) proposes that the probability that a piece of information is used to make a judgment reflects its (1) accessibility, or the ease with which it can be retrieved from memory; (2) diagnosticity, or the ability to make the judgment based on that information alone; and (3) accessibility and diagnosticity relative to other information. When consumers have several diagnostic information sources, selecting and using one lessens the use of others (J. G. Lynch, Marmorstein, & Weigold, 1988).

The IAM – Information Adoption Model (Sussman & Siegal, 2003) is drawn from TAM - Technology Acceptance Model and ELM - Elaboration Likelihood Model. ELM - Elaboration Likelihood Model (Petty & Cacioppo, 1986) identifies two relatively distinct routes to persuasion. Firstly, there is the central route, which is persuasion induced by a person's careful and thoughtful consideration of the true merits of the information presented in support of a concept or idea. The second route does not necessitate scrutiny of the information presented and is mostly the result of a simple cue (e.g. source credibility), and which is referred to as the peripheral route.

The IAMM was developed by Sussman & Siegal (2003), who integrated the theory of reasoned action (Fishbein & Ajzen, 1975); (Ajzen & Fishbein, 1980) and the Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986) to explain the ability of computer-mediated communications such as email messages to provoke behavioral modification in receivers (Sussman & Siegal, 2003). Information adoption is the process by which people purposefully engage in using information (C. M. K. Cheung et al., 2013; Sussman & Siegal, 2003).

The IAMM suggests that source credibility and argument quality predict the perceived usefulness of information, which in turn influences information adoption (Sussman & Siegal, 2003). Consumer expertise & involvement is considered a moderating variable in this relationship. There is a paucity of studies that have examined the determinants of information adoption in eWOM research.

Figure 3- 1: Moderated Model of Information Adoption



2.7 Gaps in Literature

Numerous studies have shown that the review systems have a significant impact on customer decision-making process, their satisfaction with goods and services, and the overall value of online economic transactions (Balasubramanian, Sridhar; Mahajan, 2001; Hennig-thurau et al., 2016).

Though there are a lot of studies around how eWOM affects the trust in the product and the purchase decision, there is a significant research gap around how the eWOM system affects trust in the reviews leading to review acceptance. Review acceptance has been explored to a limited extent in a few of the past studies (X. Wang, 2007a; X. Wang, Teo, & Wei, 2015; Yoon, 2008). By review acceptance, we mean that the reviews helped the consumer arrive at a decision regarding the product purchase which could be positive or negative. Even if a review helps the consumer decide against the purchase or lets him make the purchase while knowing about

drawbacks of the product, it would be considered helpful. Thus, we are not studying 'purchase intent' but 'review acceptance'.

Past studies have studied the aggregate review system. Quantified metrics/summary statistic of reviews have been used. (Ba & Pavlou, 2002; Dellarocas, 2003; Gefen & Pavlou, 2004; Pavlou, Liang, & Xue, 2007)**.** The studies for factors at a single review level have not been focused on. The quality/experience metrics have not received attention. Very few studies that consider **product category & consumer characteristics along with the review factors** to study the holistic framework and linkages

OPRs have been studied at a market-level analysis (sales/purchase outcome perspective) (Chevalier & Mayzlin, 2006b; Clemons et al., 2006; Godes & Mayzlin, 2004; Y. Liu, 2006; C. Park & Lee, 2009)**.** Not enough studies from an **information processing perspective** (review factors leading to review acceptance). OPR is not similar to marketer information designed to convince the consumer to buy. Thus, a purchase outcome expectation is not correct.

Gaps identified from practice:

During the secondary research conducted to study the review system, quite a lot of reviews were encountered that described their experience with the product/service in far more detail. These reviews share personal stories/ anecdotes, post usage experience, and recommendations. In the wider literature, argument quality is the factor that has been used to rate the qualitative content section of the review. However, some of these were beyond argument quality.

A deeper literature review was conducted to understand if any other factors had been identified to explain this.

Attitude Predictability and Helpfulness in Online Reviews: The Role of **Explained Actions and Reactions**. **Explained reactions is identified when the content reads '**I love this product because'. Reviewers are sharing subjective explanations of why they love/recommend the product/experience. (Moore, 2015)

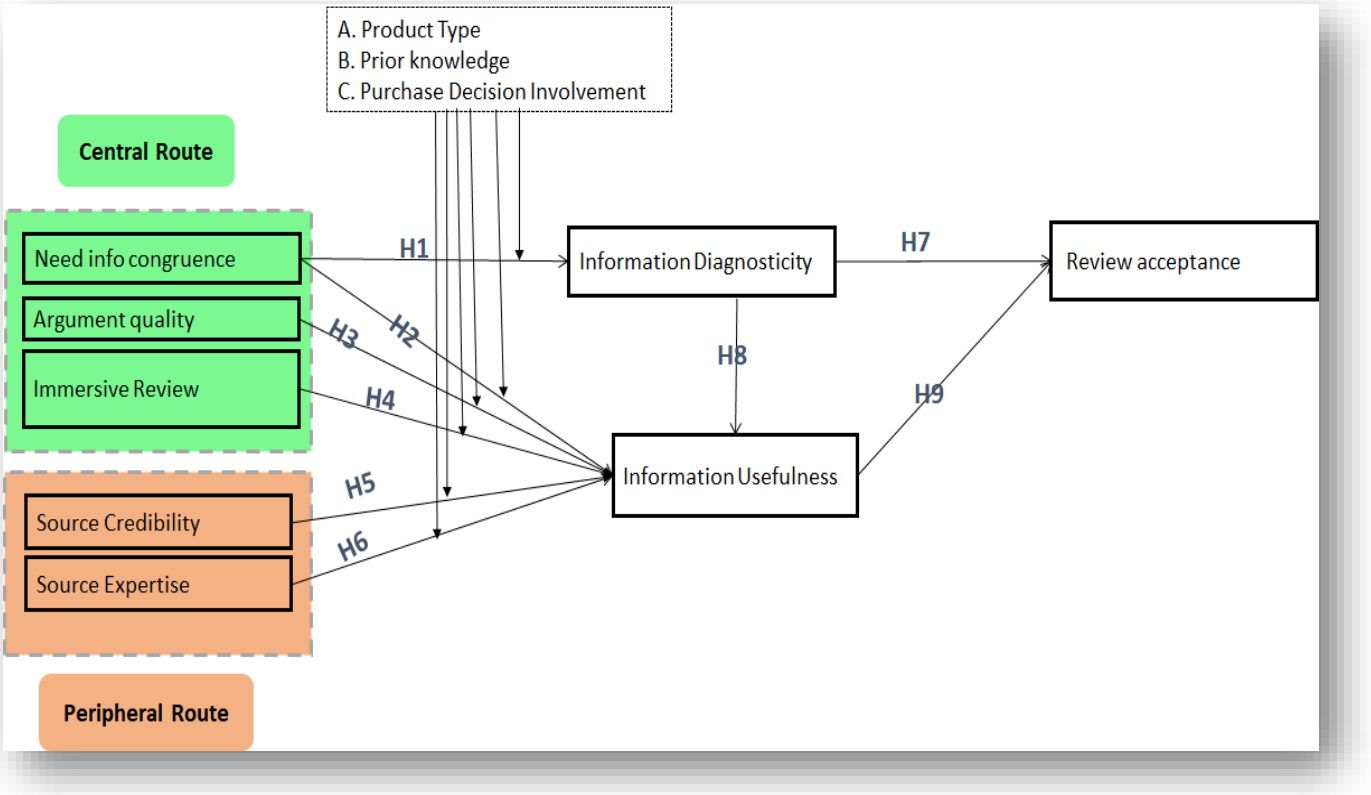
eWOM overload and its effect on consumer behavioural intention depending on consumer involvement. This studies **Informant review vs recommender review**. (D. Park & Lee, 2007).

Social Media Brand Community and Consumer Behaviour: Quantifying the Relative Impact of User and Marketer-Generated Content. The study uses the embedded content valence to capture the **persuasive effect**. (Goh, Heng, & Lin, 2013). However, none of these factors were able to explain what was being looked for. This was termed 'immersive review' and explored further.

2.8 Conceptual Framework

The current research adopts the IAMM and the ELM (Sussman & Siegal, 2003) in an attempt to understand the information adoption in the perspective of Online Product reviews. However, the factors argument quality and source credibility would not suffice to explain Information acceptance in the context of online review platforms. Thus, we built upon the above model to construct a new theoretical framework that can be applied to analyze the online Product Review System. In Figure 3.2, we illustrate the constructs of this study and the hypothesized relationships.

Figure 3- 2: Proposed Conceptual Model



Research Questions

This study identifies factors and relationships among factors that may influence a consumer's acceptance of online product reviews. Also, this study investigates the moderating effect of product types and consumer characteristics on the consumer's recommendation acceptance. With this purpose in mind, the research will be guided by the following main questions:

Which factors will influence information seekers' diagnosticity, usefulness & acceptance of OPRs?

Previous research showed that product types played a critical role for a consumer shopping on the Internet (Girard & Korgaonkar, 2002; Senecal & Nantel, 2004). A question that can be framed is:

Does the influence of a review of a product differ based on the product type?

According to ELM, the degree of influence that results from the central or the peripheral cues depends on the recipient's ability and motivation, which have been empirically studied in terms of the recipient's expertise and involvement (Sussman & Siegal, 2003; W. Zhang & Watts, 2003). The critical question then is:

To what extent do consumer's personal characteristics affect his diagnosticity & perceived usefulness leading to OPR acceptance?

Central Route – variables

Need information Congruence & Information Diagnosticity

Need-Information Congruence has been studied as an antecedent to Information Diagnosticity (X. Wang, 2007a; X. Wang et al., 2015; Yoon, 2008). This draws from the Accessibility-Diagnosticity framework. As Diagnosticity assessment is task specific (Gershoff et al., 2001), the product information that is unable to facilitate the consumer in gaining the needed knowledge would be deemed to be nondiagnostic.

H1: The congruence of a product review with the consumer's consumption need will increase the perception of Information Diagnosticity.

Need information Congruence & Information Usefulness

In eWOM communications, if the informant only provides information about the product attributes in which he or she is interested in the review, the consumers whose preferences differ from those of the informant will be likely to find the review to be less useful because they are not able to assess the product performance in the areas they deem important. Heterogeneity of consumption needs increases the possibility of mismatch of needs between an informant and a consumer. A product attribute that concerns the consumer most may not be equally important to the informant and thus may not be included in the informant's product review in the eWOM system.

H2: The congruence of a product review with the consumer's consumption need will heighten the perception of Information Usefulness.

Argument Quality and Information Usefulness

Information quality is defined as 'the quality of the content of a consumer review from the perspective of information characteristics' (D. Park et al., 2007). The importance of information quality of OPRs and its influence on consumer decision making has been investigated in information systems literature (C. M. K. Cheung et al., 2013; Lee, Park, & Han, 2008; D. Park et al., 2007) but marketing research on this topic is scant. Based on the IAMM, consumers will scrutinize the quality of the arguments in OPRs to make a decision about purchasing a product or service. Researchers in eWOM have demonstrated that the quality of arguments (information relevance, understandability, sufficiency, and objectivity) contained in OPRs influence high-involvement consumer behavior (Lee et al., 2008; D. Park et al., 2007)), while C. Cheung & Lee (2009) suggested that eWOM information credibility influenced information adoption among Chinese consumers. We argue that consumers will find information to be more useful in their decision-making process if the information in OPRs is determined to be of high quality.

H3: There is a positive relationship between argument quality and usefulness of information.

Immersive Review & Information Usefulness

Argument quality has been consistently identified as a major criterion in the persuasion and communication literature (Miller & Levine, 1996; Slater & Rouner, 1996). In ELM, argument quality refers to "the audience's subjective perception of the arguments in the persuasive message as strong and cogent on the one hand versus weak and specious on the other" (Petty & Cacioppo, 1986). As a central cue, argument quality determines one's attitude towards a message primarily through careful deliberation about the merits of the arguments presented. A message with stronger arguments is expected to yield more favorable responses. Similarly, information quality has been shown to be an important antecedent of knowledge adoption in organizations (Sussman & Siegal, 2003). It has also been shown to influence how people perceive the believability of web information (C. Cheung & Lee, 2009; Wathen & Burkell, 2002). Thus, in the context of online reviews, we expect that a review with a stronger argument quality should be perceived as more credible.

H4: There is a positive relationship between Immersive Review & Information Usefulness

Peripheral Cues – Variables

Source credibility and Information Usefulness

Source credibility and information usefulness are considered as fundamental predictors of a consumer's acceptance of a message in eWOM (Lazarsfeld et al., 1944; McGinnies & Ward, 1980). In this study we focus on online consumer reviews which are generally generated by anonymous sources or consumers that have no prior relationship with the receiver. Most ecommerce websites provide some meta-information about the expertise and the credibility of reviewers to enable consumers to infer the reliability of a source (e.g., the feedback system to evaluate the reliability of a seller in Amazon and eBay). The influence of source credibility on consumer behavior has been studied by (Senecal & Nantel, 2004), who found that the expert systems source (e.g., recommender system) is the most influential source even if it was perceived as possessing less expertise than human experts (e.g., salespersons, independent experts), and as less trustworthy than 'other consumers' (e.g., friends, relatives, acquaintances). However, we believe that a source that is considered as credible will be perceived as one that is likely to provide useful and correct information for the receiver. Therefore, we hypothesis:

H5: There is a positive relationship between Source Credibility and Information Usefulness

Source Expertise & Trust

The perceived expertise of the sender is a significant determinant of credibility (Hovland, Karl Weiss, Walter, 1948)).

H6: There is a positive relationship between Source Expertise and Information Usefulness

Information Diagnosticity and Review Acceptance

Information Diagnosticity is defined as the Perceived ability of communicated product information to predict actual product performance (Kempf & Smith, 1998). Empirically, Kempf (1998), Jiang and Benbasat (2005) and Suh and Lee (2005)explicate the effect of perceived diagnosticity on product learning and consumption decision in product trial process and virtual shopping environments. This was extended to conjecture a similar effect of information diagnosticity in the eWOM context by (X. Wang et al., 2015).

H7: There is a positive relationship between Information Diagnosticity and Review Acceptance.

Information usefulness, Information Diagnosticity & Review Acceptance

Information usefulness *has been studied as a mediator between* Information Diagnosticity & Review Acceptance (Yoon, 2008).

H8: Information usefulness mediates the relationship between Information Diagnosticity and Review Acceptance.

Information Usefulness and Information acceptance

Information usefulness is a key construct in adoption behavior (Sussman & Siegal, 2003). Drawing on TAM theories, perceived information usefulness refers to an individual's perception that using a new technology will enhance or improve his or her performance (C. Cheung & Lee, 2009). For instance, users of eWOM would consider whether the opinions and information contained in OPRs are useful to help them to make a better buying decision. Therefore, if consumers believe that OPRs are useful, there will be a greater likelihood that they will accept the recommendations provided. Drawing on the IAMM, we argue that perceived information usefulness will predict consumer information acceptance.

H9: There is a positive relationship between information usefulness and information acceptance

Moderators

Personal characteristics of information recipients

Customer Involvement & Expertise

According to ELM, the degree of influence that results from the central or the peripheral cues depends on the recipient's ability and motivation, which have been empirically studied in terms of the recipient's expertise and involvement (Sussman & Siegal, 2003; W. Zhang & Watts, 2003). Recipient's expertise refers to the recipient's prior knowledge about the issue, while recipient's involvement refers to the personal relevance of the issue (Sussman & Siegal, 2003).

ELM states that central cues will have a greater influence on their judgment when a recipient is able and motivated to consider the information in a given message. People with expertise have the knowledge and ability to evaluate a message. Similarly, people with a high level of involvement are sufficiently engaged and motivated to understand a message. Hence, these groups of people are more likely to judge a message based on argument quality (Sussman & Siegal, 2003). In other words, the influence of argument quality is expected to be stronger when the recipient's expertise and/or involvement are higher.

In this research, we consider the recipients **'Prior Knowledge' instead of 'expertise'**. This is because it is impossible for someone the be able to claim to be an expert in a category. What is essentially being said is that the person is knowledgeable about the category that he is looking to make a decision in.

Purchase decision involvement was studied.
The concept of involvement has been widely used in consumer behavior research since its emergence in 1962. Both social psychological and consumer behavior studies have established involvement as a useful tool to explain a wide range of behavioral and decision processes. Involvement is evoked by a particular stimulus or situation. No matter which approach is used to define and operationalize involvement, there is an underlying theme in the concept of involvement that reconciles them: the focus on personal relevance to the stimulation or situation. In this research, we are looking at the decision-making process that the consumer is going through and check his involvement for that phase. Thus, Purchase decision involvement seemed to fit the best.

However, when the recipient is unable to or is not motivated to consider the information, peripheral cues are expected to have a greater role in shaping their judgment. People without the relevant expertise simply cannot assess the quality of a message. Similarly, people who are uninvolved are not motivated to cognitively process a message in detail. Rather, an uninvolved novice is more likely to rely on other information cues, such as credibility of the source, when judging a message (W. Zhang & Watts, 2003). In addition to credibility, a review's consistency with other reviews creates less cognitive dissonance (Cooper. Joel, 2007; Festinger, 1957; Pornpitakpan, 2006; Strong, 1968). This is especially true of people who are less involved (i.e., they are not as willing to exert substantial cognitive processing and dissonance resolution efforts), and of those with low expertise levels (i.e., they lack the knowledge/capability to exert more cognitive processing and dissonance resolution efforts). Hence, when faced with a consistent review, such individuals find it easier to accept the review. Similarly, two-sided reviews could provide greater assurance to individuals who are inclined to be less involved or provide greater justification that a review is credible to those with less knowledge about the perceived neutrality of the review. Generally, the influence of peripheral cues is expected to be stronger when the recipient's expertise and involvement are at lower levels.

Product Type

A key determinant of search cost is the nature of the product under consideration. According to Nelson (1970, 1974), search goods are those for which consumers have the ability to obtain information on product quality prior to purchase, while experience goods are products that require sampling or purchase in order to evaluate

product quality. Examples of search goods include cameras (Nelson, 1970) and natural supplement pills (Weathers & Keane, 2007), and examples of experience goods include music (Bhattacharjee, Gopal, & Sanders, 2006; Nelson, 1970) and wine (Klein, 1998). Although many products involve a mix of search and experience attributes, the categorization of search and experience goods continues to be relevant and widely accepted (Huang, Lurie, & Mitra, 2009). Products can be described as existing along a continuum from pure search goods to pure experience goods. To further clarify the relevant distinctions between search and experience goods, the starting point is Nelson's (1974) assertion that "goods can be classified by whether the quality variation was ascertained predominantly by search or by experience." Perceived quality of a search good involves attributes of an objective nature, while perceived quality of an experience good depends more on subjective attributes that are a matter of personal taste. Several researchers have focused on the differing information needs of various products and on how consumers evaluate and compare their most relevant attributes. The dominant attributes of a search good can be evaluated and compared easily, and in an objective manner, without sampling or buying the product, while the dominant attributes of an experience goods are evaluated or compared more subjectively and with more difficulty (Huang et al., 2009). Unlike search goods, experience goods are more likely to require sampling in order to arrive at a purchase decision, and sampling often requires an actual purchase. For example, the ability to listen online to several 30-second clips from a music CD allows the customer to gather pre-purchase information and even attain a degree of "virtual experience" (Klein, 1998), but assessment of the full product or the full experience requires a purchase. In addition, (Weathers & Keane, 2007) categorized goods according to whether or not it was necessary to go beyond simply reading information to also use one's senses to evaluate quality. We identify an experience good as one in which it is relatively difficult and costly to obtain information on product quality prior to interaction with the product; key attributes are subjective or difficult to compare, and there is a need to use one's senses to evaluate quality. For a search good, it is relatively easy to obtain information on product quality prior to interaction with the product; key attributes are objective and easy to compare, and there is no strong need to use one's senses to evaluate quality. This difference between search and experience goods can inform our understanding of the helpfulness of an online customer review. Customer reviews are posted on a wide range of products and services and have become part of the decision process for many consumers. Although consumers use online reviews to help them make decisions regarding both types of products, it follows that a purchase decision for a search good may have different information requirements than a purchase decision for an experience good. Product Type has been studied as a moderator in previous studies (Chua & Banerjee, 2014; Mudambi & Schuff, 2010). We expect the product type to moderate the relationship of all variables with trust & perceived helpfulness of an online review. We intend to explore this further.

Table 2- 1: Hypothesis for relationship between Independent & Dependent Variable

Hypothesis	Variable	Factor	Group Type
H1	Information Diagnosticity	NIC	Yes
			No
H2	Information Usefulness	NIC	Yes
			No
H3	Information Usefulness	AQ	High
			Low
H4	Information Usefulness	IR	Yes
			No
H5	Information Usefulness	SC	Yes
			No
H6	Information Usefulness	SE	Yes
			No

Table 2- 2: Hypothesis for relationship between dependent variables

Hypothesis	Variable	Factor
H7	Information Diagnosticity	Review Acceptance
H8	Information Usefulness	Review Acceptance
H9	Information Diagnosticity	Information Usefulness

Table 2- 3: Hypothesis for Moderation Effects

Hypothesis	Moderator	Factor	Variable
H1A	Product Type	NIC	Information Diagnosticity
H1B	Prior knowledge		
H1C	Involvement		
H2A	Product Type	NIC	Information Usefulness
H2B	Prior knowledge		
H2C	Involvement		
H3A	Product Type	AQ	Information Usefulness
H3B	Prior knowledge		
H3C	Involvement		
H4A	Product Type	IR	Information Usefulness
H4B	Prior knowledge		
H4C	Involvement		
H5A	Product Type	SC	Information Usefulness
H5B	Prior knowledge		
H5C	Involvement		
H6A	Product Type	SE	Information Usefulness
H6B	Prior knowledge		
H6C	Involvement		

CHAPTER 3: METHODOLOGY

3.1 Proposed Research Methodology

3.1.1 Method

The research was divided into the following two phases –

Phase 1: Pre-study to confirm tool reliability and validity & manipulations

Phase 2: Tested the model through an experimental design.

3.1.2 Tool

An experiment was designed where the 5 independent variables was varied at 2 levels to create a 2^5 factorial experiment matrix. Thus, 32 reviews were created for each search and experience good with all the manipulations.

A gamified webpage was created with all the reviews linked to a random number. The participants could randomly choose any number on the webpage and it would lead them to one of the questionnaires.

Table 3- 1: Manipulations done on the variables

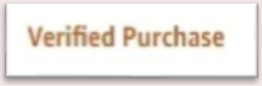
Variable	Manipulation 1	Manipulation 2
Need information Congruence	Incongruent	Congruent
Argument Quality	Low Quality Argument	High Quality Argument
Immersive Review	Not Immersive	Immersive
Source Credibility	No Badge	
Source Expertise	No Badge	

Table 3- 2: Variable Treatments in the Study

	Variable	**Treatment in the Study**
Moderator	Product Type	**Manipulated**
Central route Variables	Need information Congruence	**Manipulated**
	Argument Quality	**Manipulated**
	Immersive Review	**Manipulated**
Peripheral Route variables	Source Credibility	**Manipulated**
	Source Expertise	**Manipulated**
Dependent Variables	Information Diagnosticity	**Measured**
	Information Usefulness	**Measured**
	Review Acceptance	**Measured**
Consumer Characteristics	Prior Knowledge	**Measured**
	Involvement	**Measured**

The participant was shown a set of predefined individual reviews for which he would need to answer the questions for the dependent variables.

Table 3- 3: Measurement Instruments

Construct	Operational Definition	Instruments	Source
Information Diagnosticity	Perceived ability of communicated product information to predict actual product performance	1.The product review helped me evaluate the product. 2.This review provided sufficient information around my requirements 3.This review let me know the performance of the product for my requirements	Kempf and Smith (1998), Jiang and Benbasat (2007)
Information Usefulness	The extent to which a product review enables one to judge important experiential attributes of the product. It is determined by the perceived correlation between the product information and the judgment a potential consumer needs to make.	1.This review will help me make a better decision 2.This review will make it easier for me to arrive at a decision 3.I found the review useful	Koufaris (2002), Kamis et al. (2008)
Purchase Decision Involvement	Involvement was considered as Consumer's purchase decision involvement	1. In selecting from the many products available in the market, would you say that: I would not care at all as to which one I choose 1 2 3 4 5 6 7 I would care a great deal as to which one I choose. 2. Do you think that the various types of products available in the market are all very alike or are all very	Adapted from Mittal (1989)

		different? They are alike. 1 2 3 4 5 6 7 They are all different. 3. How important would it be for you to make a right choice of product? Not at all important 1 2 3 4 5 6 7 Extremely important 4. In making your selection of a product, how concerned would you be about the outcome of your choice? Not at all concerned 1 2 3 4 5 6 7 Very much concerned.	
Prior Knowledge	Refers to the recipient's prior knowledge about the product being reviewed	I've never heard of it" to ''I know it well	Adapted from Park & Lee (2007)
Review Acceptance	The consumer's willingness and intention to accept the eWOM and intent to use	1.I am likely to agree with what is written in this review 2.I am likely to take action based on what is written in this review 3.This review will influence my decision to choose this phone	Gershoff, et al. (2003)

Measurement of Experimental Variables

Product Type: Park and Lee (2009) indicated that eWOM has more impact on experience goods than search goods. This is because consumers cannot usually judge the attributes of an experience good before they purchase and use it (Huang et al., 2009). Additionally, consumers only gather information from product images and descriptions, especially in an online environment. Therefore, consumers must be aware of product reviews written by other consumers. For this study Product Type was varied through reviews shown for a mobile phone for search good and a homestay on Airbnb for an experience good.

Need Information congruence: The reviews were manipulated to be congruent/incongruent to the requirements that the product/place was supposed to fulfil as per the scenario that was presented to the participant beforehand.

Argument Quality: Argument quality is an important factor in affecting consumers' trust in information (Gefen, Benbasat, & Pavlou, 2008) Individuals who make relevant, objective, and verifiable arguments tend to be more persuasive and are perceived more credible (Petty, Cacioppo, & Schumann, 1983). Thus, the type of argument quality (e.g. strong versus weak) is an integral factor to consider. The argument quality of review content was manipulated using Toulmin's (1958) model of argumentation as applied by Furner, Racherla, and Zhu (2012). According to Toulmin, a trust-assuring argument should have: 1) a claim or conclusion that is put forward for general acceptance, 2) evidence presented in the argument to support the claim, and 3) the part of the argument that explains why the evidence and claim should be accepted, known as backing. Real consumer-generated reviews were selected from popular review websites and were varied in aspects of argument quality.

Immersive Review: A review that describes the product usage experience of the reviewer is tagged as an immersive review versus a review that does not have any of this.

In case of a Search Product (Mobile phone), a post usage review of the product which describes product after the actual usage Were tagged an immersive review. *(e.g.: I am writing this review after using the phone for more than 3 weeks now... was using Apple earlier too so of course it felt like home.. I upgraded from. 6s 64 gig to iPhone X and must say it was a much needed switch…..)* The highlighted text is considered immersive.

In case of an experience product (Homestay), a review which describes the experience of the stay beyond just the information aspects is considered as an immersive review. For a homestay, information around location, cleanliness, quality of food, professionalism would still fall under the purview of 'information'. Additional information around the host, the details of the property, any feedback involving the names of the personnel, with their recommendation, additional stuff about the homestay, was considered an immersive review. *(e.g.: We had an amazing 1 day stay at Mridul's place. Initially, we had some problems in finding the place due to bad connectivity and wrong route maps. The place was beautiful, calm, clean and well maintained. Though Mridul was not present at the place himself, Shanthi was there to welcome us and helped us to get settled in the rooms comfortably. The dinner prepared by her was especially fantastic, one of the best we had on our trip. Next day morning, we went for a walk around their beautiful coffee estate. It was a really nice experience altogether. I would highly recommend it for people who are looking for a couple of days stay in Coorg.)* The underlined text is considered immersive.

Source Credibility: In this study we manipulate source credibility across low and high. For high source credibility, we use a 'verified buyer' tag next to the reviewer whereas for the low source credibility condition, there will be no such tag.

Source Expertise: In this study, source expertise is manipulated by using high and low reviewer status on the presented reviews. In the high expertise conditions, the reviewer was a member of the review website since 2008 and wrote more than 200 reviews on this website. In addition, the reviewer had a "Top Reviewer" or "Top Reviewer" badges next to his/her screen name. In the low expertise condition, the reviewer was a member since 2013 and wrote one review on this website. Meanwhile, the low expertise reviewer didn't have a "Top Reviewer" badge next to his/her screen name.

Purchase Decision Involvement: Involvement was considered as Consumer's purchase decision involvement. The scale by Mittal (1989) was adapted and used to measure this

Prior Knowledge: Prior knowledge was investigated in the survey by an item with anchors ranging from ''I've never heard of it" to ''I know it well" (adapted from Park & Lee (2007)). Prior knowledge is used as a moderator for hypotheses testing.

3.1.4 Dataset Acquisition

Sample Review Set Creation

To investigate the moderating impact of product type, the test product needed to 1) require participants to engage in information processing, 2) stand for a brand of moderate interest, and 3) be a high-involvement good. The first parameter was necessary to engage the participants in active processing for evaluation of the test product. This is commonly achieved in consumer behavior research by informing participants that they will be asked to report their opinions and thoughts upon completion of the study (Kempf & Smith, 1998). The second requirement was important to minimize any preconceived response bias.

To evaluate our research model, we focus on product reviews that have been published on amazon.in for the search good (mobile phone). Amazon is one of the pioneering review websites that supports peer-evaluation of reviews through social navigation. In fact, its popularity and longevity has made it almost a de facto standard of review websites for scholarly inquiry. Amazon allows for all the components in the theoretical model to be captured and analyzed, which further makes it appropriate for this paper.

Search Good: For mobile phones, the reviews for Xiaomi Redmi Note4 were selected. This brand and model were chosen for the below reasons –

Xiaomi is a relatively new entrant and is known for a brand that was initially built entirely on word-of-mouth. Till recently, the brand did not use mass advertising and thus does not have a heavy 'brand equity' that would override the WOM. Also, due to the absence of brand led marketing, the way for consumers to make a purchase decision and to understand the product was largely through eWOM. The brand has built itself through eWOM and even today new models are launched only through exclusive launches conducted online. Additionally, this product is priced in the mid-range segment which makes it a part of the consideration set for most people considering a mobile phone purchase.

Experience Good: The reviews for a homestay on Airbnb India were chosen for evaluating the 'experience product'.

To ensure that the product chosen is as close as possible to the extreme end of the 'experience good' scale, a homestay on Airbnb was considered. A homestay is clear of any preconceived information/bias. In case of a hotel, there could be some benchmarks and related expectations based on the name/star rating of the hotel. Whereas in the case of a one-off homestay, the only way to find out information about it is by reading the reviews posted by people who have experienced it. Third, to ensure realism, we need a product whose information is often obtained online. Based on these criteria, we chose a hotel as the target experiment product

It was ensured that the homestay chosen is an off-the-track, one-off homestay and not a known name. Additionally, keeping with the theme of home-stays, the reviews chosen were of owner co-stay properties. Airbnb also happens to list stand-alone homes/bungalows/resorts etc.

32 reviews each for mobile phone & homestay were created. The review content was collected from the above mentioned websites and reviewed/edited to ensure all the necessary factors are present. These reviews were then edited to create the manipulated set of 64 reviews. Necessary care was taken to ensure that the reviews spoke only about the search/experience product and were not reviews about the platform.

The length for the review was maintained constant to control for variability due to review length.

The final set of reviews were a part of a pretest. 20 people from the ecommerce industry were made to go through the reviews. It was confirmed that the reviews communicated what was intended.

*The scenario used in this study has been adapted and modified from Grazioli and Jarvenpaa (2000).

*All the reviews were anonymized. A fictional name was added for sake of maintaining the structure of the review.

*This research studies generic reviews found on an ecommerce site and do not consider recommendations from people in friends list/social circle.

The following images show the factors as a part of the review for both search and experience good

Figure 3- 3: Sample Review for a Mobile Phone

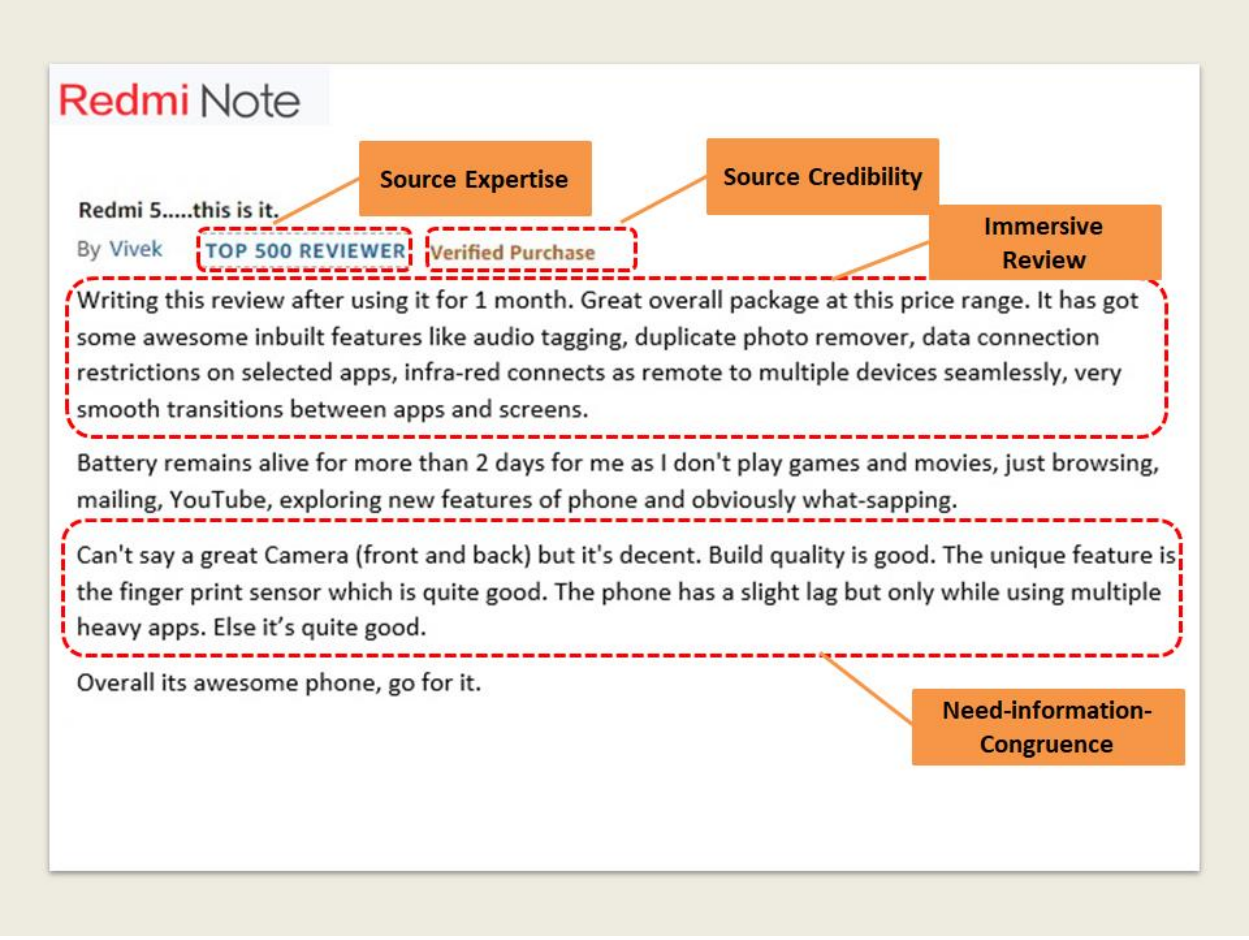

Redmi Note
Source Expertise
Source Credibility
Redmi 5.....this is it.
By Vivek
TOP 500 REVIEWER
Verified Purchase
Immersive Review
Writing this review after using it for 1 month. Great overall package at this price range. It has got some awesome inbuilt features like audio tagging, duplicate photo remover, data connection restrictions on selected apps, infra-red connects as remote to multiple devices seamlessly, very smooth transitions between apps and screens.
Battery remains alive for more than 2 days for me as I don't play games and movies, just browsing, mailing, YouTube, exploring new features of phone and obviously what-sapping.
Can't say a great Camera (front and back) but it's decent. Build quality is good. The unique feature is the finger print sensor which is quite good. The phone has a slight lag but only while using multiple heavy apps. Else it's quite good.
Overall its awesome phone, go for it.
Need-information-Congruence

Figure 3- 4: Sample Review for a Homestay

airbnb
Source Credibility
Source Expertise
Mayank
September 2017
Verified
Senior Reviewer
Anooradha's home is as lovely as the location. It faces the lake (lake bed when we visited, as it's dry at this time of the year). You can go for long walks on the lake bed and enjoy the breeze and sun. Rooms are aesthetic, clean and comfortable. The food served was hot & delicious. All required amenities are there with sports like Chess, Football, Carrom, TT, Badminton.
Although the family and staff are always around, you hardly sense their presence and
the place to oneself, while still having all the help you need at hand! Overall wonderfu
will visit again soon!
Immersive Review
It was our first anniversary and we wanted it to be special. Special thanks to Anooradha n Aditya for making it really memorable for us. They decorated our room and called for a cake! We had breakfast on the house, good homely food from Sangita the housekeeper.
The bungalow is safe and secure with the caretaker and his family's home in the same premises and the property is compounded as well. The place is not very far from the city, you have the option of taxis.
Need-information-Congruence

3.1.5 Respondent Sample Description

The sample for this research was Indian active internet users in the age group of 20 – 45 years. The participants were qualified based on the criteria of their having made at least 1 online purchase in the past 6 months.

This demographic was chosen because of the following reasons -

- Important ecommerce customer demographic for whom online buying is a way of life.
- Grew exposed to technology. Is tech savvy.
- Has the purchasing power to explore online buying.
- Comfortable with terminologies and process of online purchase.[9]

[9] Forbes, 2018.

3.1.6 Sample statistics

Table 3- 4: Gender

Male	1020
Female	920

Table 3- 5: Age

20 - 26	735
27 - 33	695
34-40	510

Table 3- 6: Education

Undergraduate	120
Graduate	644
Postgraduate	1176

CHAPTER 4: DATA ANALYSIS & RESULTS

4.1 Assessment of measurement instruments

4.1.1 Reliability Analysis

Reliability is the ability of the scale to produce consistent results. It is the extent to which a scale is dependable and trustworthy.

If a scale is not reliable, it will result in incorrect outcomes. The instrument used in the current research is accessed for reliability using Cronbach's Alpha and is a measure of internal consistency amongst items of a latent construct.

Reliability of these constructs was calculated based on Cronbach's alpha. All of the coefficients of reliability measures for the constructs exceed the threshold of 0.70 (Nunnally, 1978).

Table 4- 1: Reliability

Factor	**Number of Items**	**Cronbach's Alpha**
Information Diagnosticity	3	0.917
Information Usefulness	3	0.944
Review Acceptance	3	0.924

4.1.2 Validity Analysis

Validity is the ability of the instrument to produce accurate results. IT is the extent to which the scale measures what it is supposed to measure. If the instrument is not valid or is not tested for validity, the results are incorrect. The current study employs factor loadings and average variance extracted to confirm validity.

Factor Loading:

The size of factor loading is an important indicator of convergent validity. Factor loadings that are significant with loading values above 0.5 indicate convergent validity. The following table shows construct, items of

construct, their loading values and significance. Note that loadings of all constructs are above the threshold mark. Hence construct validity is supported.

Average Variance Extracted (AVE)

Average Variance Extracted is another important indicator of construct validity. As a rule of thumb, AVE of 0.5 or higher suggests adequate convergence.

Average Variance Extracted for all constructs is above the threshold mark of 0.5 and factor loadings are above threshold mark of 0.5. Hence construct validity is supported.

Table 4- 2: Validity

Construct	Information Diagnosticity	Information Usefulness	Information Acceptance
P1	0.84		
P2	0.893		
P3	0.915		
Q1		0.931	
Q2		0.919	
Q3		0.913	
R1			0.863
R2			0.912
R3			0.913
Variance Explained (96.5%)	7.8	8.4	80.3

Discriminant Validity

Construct of model should be unrelated. Discriminant validity assesses the extent to which a construct is truly distinct from the other constructs in the model. High discriminant validity provides evidence that a construct is unique and different from the rest and have phenomenon that other measures do not. Discriminant validity exists if average of Average Variance Extracted is greater than r^2 between two constructs or said in other words, the square root of AVE should be larger than the correlations between constructs. Table below shows discriminant validity

Table 4- 3: Squared Correlation Coefficient

construct		construct	correlation coefficient	Squared correlation coefficient
RA	<-->	F2	0.90	0.814
ID	<-->	F2	0.89	0.796
RA	<-->	F1	0.87	0.7569

Table 4- 4: Discriminant Validity

construct		construct	Average of AVE for two constructs	Squared correlation coefficient
RA	<-->	F2	0.825	0.814
ID	<-->	F2	0.81	0.796
RA	<-->	F1	0.87	0.7569

Discriminant validity results show that average of Variance Extracted is greater than r^2 between two constructs, hence overall the discriminant validity is supported.

4.2 Data Analysis & Results

4.2.1 Results of t test

To test the hypotheses, independent sample t-test was conducted to test the difference of mean between two groups of each factor.
The results of the t-tests are shown in Table below.

Table 4- 5: Results of t test

Hypothesis	**Variable**	**Factor**	**Group Type**	**N**	**Mean**	**Std Deviation**
H1	Information Diagnosticity	NIC	Yes	970	4.168	1.28626
			No	970	3.5357	1.45053
H2	Information Usefulness	NIC	Yes	970	3.5502	1.18501
			No	970	3.2261	1.2753
H3		AQ	High	970	3.5285	1.19719

	Information Usefulness		Low	970	3.2478	1.26905
H4	Information Usefulness	IR	Yes	970	4.7221	0.96366
			No	970	2.9773	1.52089
H5	Information Usefulness	SC	Yes	970	3.3615	1.24303
			No	970	3.4148	1.23962
H6	Information Usefulness	SE	Yes	970	3.3835	1.25126
			No	970	3.3928	1.23187

Table 4- 6: Results of t test

Hypothesis	Variable	Factor	t	DF	Sig	Mean Diff	95% Confidence Interval	
H1	Information Diagnosticity	NIC	-10.158	1938	0	-0.6323	-0.75438	-0.51022
H2	Information Usefulness	NIC	-5.797	1938	0	-0.32405	-0.43368	-0.21443
H3	Information Usefulness	AQ	-5.012	1938	0	-0.28076	-0.39062	-0.1709
H4	Information Usefulness	IR	-30.181	1938	0	-1.74477	-1.85815	-1.63139
H5	Information Usefulness	SC	0.945	1938	0.345	0.05326	-0.05728	0.16381
H6	Information Usefulness	SE	0.165	1938	0.869	0.00928	-0.10129	0.11985

4.2.2 Testing for moderation: Univariate ANOVA

Product Type as a moderator

To test moderating effects of product types on all dependent variables, univariate analysis of variance was conducted to examine interaction effects.

Effect of Product Type:

Table 4- 7: Moderation Effect: Product Types

Hypothesis	Factor	Variable	Finding	Result
H1A	NIC	Information Diagnosticity	Significant	Search Product, NIC YES
H2A	NIC	Information Usefulness	Significant	Search Product, NIC YES
H3A	AQ	Information Usefulness	Not Significant	
H4A	IR	Information Usefulness	Not Significant	
H5A	SC	Information Usefulness	Not Significant	
H6A	SE	Information Usefulness	Not Significant	

Interaction effect of Product type with Need information congruence was significant for Information Diagnosticity. The results showed a higher effect in case of Product Type (Search)*NIC (Yes).

Interaction effect of Product type with Need information congruence was significant for Information Usefulness. The results showed a higher effect in case of Product Type (Search)*NIC (Yes)

The rest of the interaction effects were not found to be significant. The tables are as shown below

Information Diagnosticity (ID)

Table 4- 8: ANOVA Table NIC → ID: Moderating Effect of Product Type

H1A Descriptive Statistics

Dependent Variable: ID

NIC	Product_Type	Mean	Std. Deviation	N
No	Mobile phone	3.1009	1.56850	489
	Home stay	4.0539	1.28995	482
	Total	3.5740	1.51332	971
Yes	Mobile phone	4.1735	1.50441	488
	Home stay	4.3949	1.23798	482
	Total	4.2835	1.38220	970
Total	Mobile phone	3.6366	1.62706	977
	Home stay	4.2244	1.27504	964
	Total	3.9286	1.49173	1941

Table 4- 9: ANOVA Table NIC → ID: Moderating Effect of Product Type

Tests of Between-Subjects Effects

Dependent Variable: ID

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	476.655[a]	3	158.885	80.139	.000
Intercept	29989.426	1	29989.426	15126.189	.000
NIC	242.387	1	242.387	122.256	.000
Product_Type	167.320	1	167.320	84.394	.000
NIC * Product_Type	64.941	1	64.941	32.755	.000
Error	3840.327	1937	1.983		
Total	34273.556	1941			
Corrected Total	4316.982	1940			

a. R Squared = .110 (Adjusted R Squared = .109)

Profile Plots

Figure 4- 1: NIC → ID: Moderating Effect of Product Type

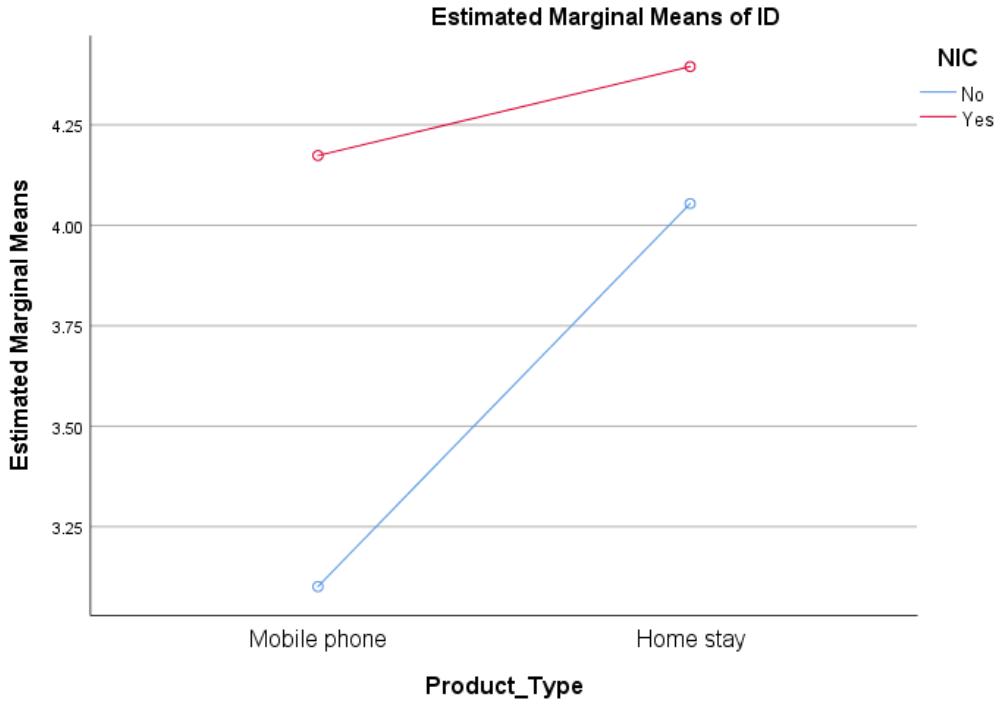


Table 4- 10: ANOVA Table NIC → IU: Moderating Effect of Product Type

Descriptive Statistics

Dependent Variable: IU

NIC	Product_Type	Mean	Std. Deviation	N
No	Mobile phone	3.2261	1.67700	488
	Home stay	4.1159	1.28648	483
	Total	3.6687	1.55966	971
Yes	Mobile phone	4.1605	1.52010	488
	Home stay	4.4675	1.19500	482
	Total	4.3131	1.37614	970
Total	Mobile phone	3.6933	1.66656	976
	Home stay	4.2915	1.25339	965
	Total	3.9907	1.50533	1941

Table 4- 11: ANOVA Table NIC → IU: Moderating Effect of Product Type

Tests of Between-Subjects Effects

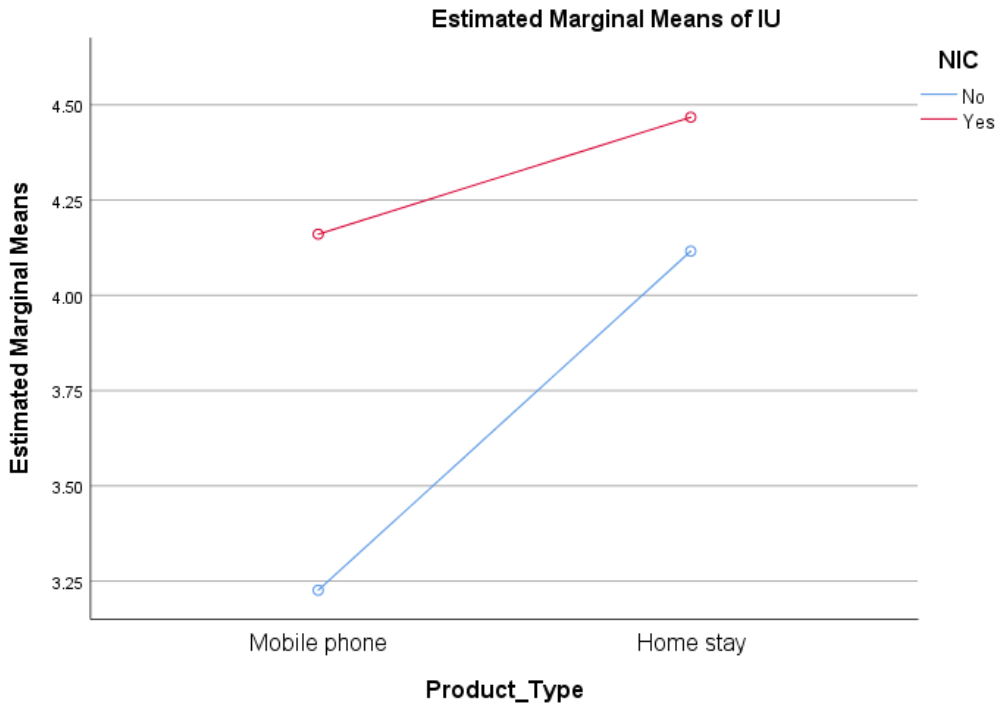
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	416.521[a]	3	138.840	67.579	.000
Intercept	30938.835	1	30938.835	15059.181	.000
NIC	200.614	1	200.614	97.647	.000
Product_Type	173.762	1	173.762	84.577	.000
NIC * Product_Type	41.213	1	41.213	20.060	.000
Error	3979.534	1937	2.054		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .095 (Adjusted R Squared = .093)

Profile Plots

Figure 4- 2: NIC → IU: Moderating Effect of Product Type



H3A

Table 4- 12: ANOVA Table AQ → IU: Moderating Effect of Product Type

Descriptive Statistics

Dependent Variable: IU

AQ	Product_Type	Mean	Std. Deviation	N
No	Mobile phone	3.5444	1.68980	488
	Home stay	4.0393	1.28098	483
	Total	3.7906	1.51996	971
Yes	Mobile phone	3.8422	1.63115	488
	Home stay	4.5443	1.17316	482
	Total	4.1911	1.46414	970
Total	Mobile phone	3.6933	1.66656	976
	Home stay	4.2915	1.25339	965
	Total	3.9907	1.50533	1941

Table 4- 13: ANOVA Table AQ → IU: Moderating Effect of Product Type

Tests of Between-Subjects Effects

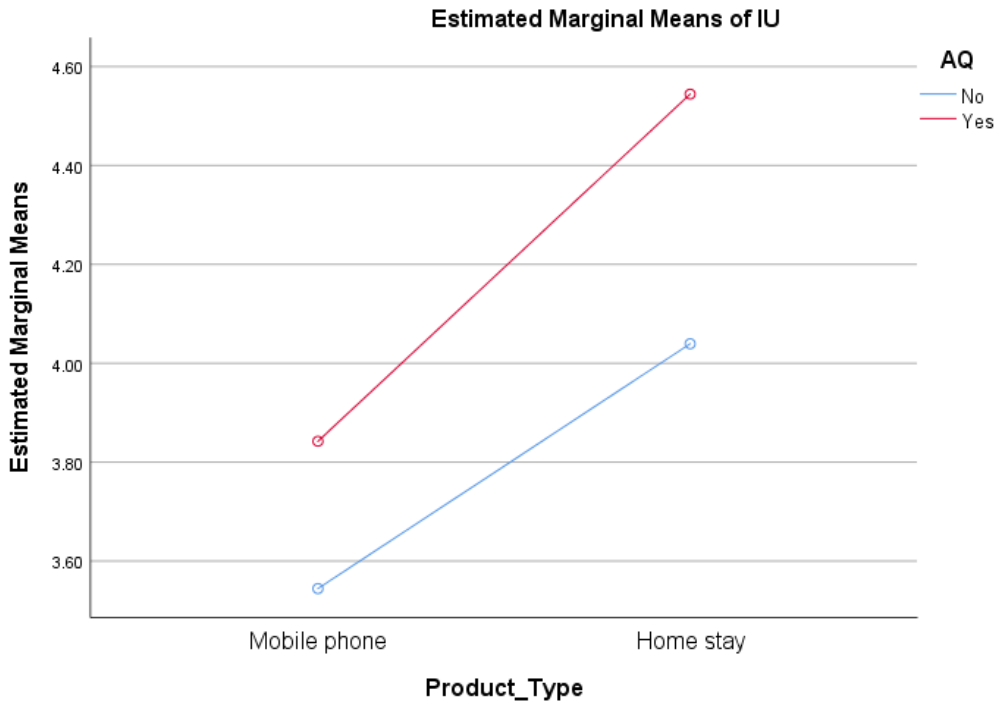
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	256.803[a]	3	85.601	40.058	.000
Intercept	30939.451	1	30939.451	14478.391	.000
AQ	78.170	1	78.170	36.580	.000
Product_Type	173.808	1	173.808	81.335	.000
AQ * Product_Type	5.203	1	5.203	2.435	.119
Error	4139.252	1937	2.137		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .058 (Adjusted R Squared = .057)

Profile Plots

Figure 4- 3: AQ → IU: Moderating Effect of Product Type



H4A

Table 4- 14: ANOVA Table IR → IU: Moderating Effect of Product Type

Descriptive Statistics

Dependent Variable: IU

IR	Product_Type	Mean	Std. Deviation	N
No	Mobile phone	3.6619	1.66076	488
	Home stay	4.2629	1.28046	483
	Total	3.9609	1.51323	971
Yes	Mobile phone	3.7247	1.67344	488
	Home stay	4.3202	1.22632	482
	Total	4.0206	1.49755	970
Total	Mobile phone	3.6933	1.66656	976
	Home stay	4.2915	1.25339	965
	Total	3.9907	1.50533	1941

Table 4- 15: ANOVA Table IR → IU: Moderating Effect of Product Type

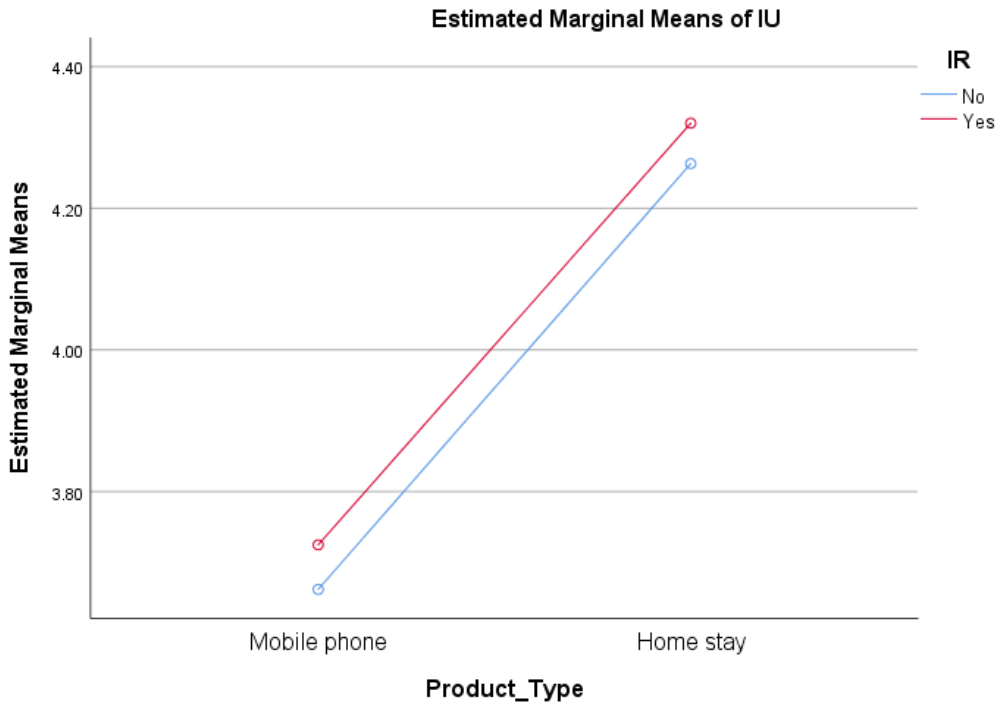
Tests of Between-Subjects Effects

Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	175.410[a]	3	58.470	26.834	.000
Intercept	30937.653	1	30937.653	14198.359	.000
IR	1.750	1	1.750	.803	.370
Product_Type	173.673	1	173.673	79.705	.000
IR * Product_Type	.004	1	.004	.002	.967
Error	4220.645	1937	2.179		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .040 (Adjusted R Squared = .038)

Profile Plots



H5A

Table 4- 16: ANOVA Table SC → IU: Moderating Effect of Product Type

Descriptive Statistics

Dependent Variable: IU

SC	Product_Type	Mean	Std. Deviation	N
No	Mobile phone	3.7152	1.65138	488
	Home stay	4.2450	1.21236	483
	Total	3.9787	1.47301	971
Yes	Mobile phone	3.6714	1.68301	488
	Home stay	4.3382	1.29277	482
	Total	4.0027	1.53766	970
Total	Mobile phone	3.6933	1.66656	976
	Home stay	4.2915	1.25339	965
	Total	3.9907	1.50533	1941

Table 4- 17: ANOVA Table SC → IU: Moderating Effect of Product Type

Tests of Between-Subjects Effects

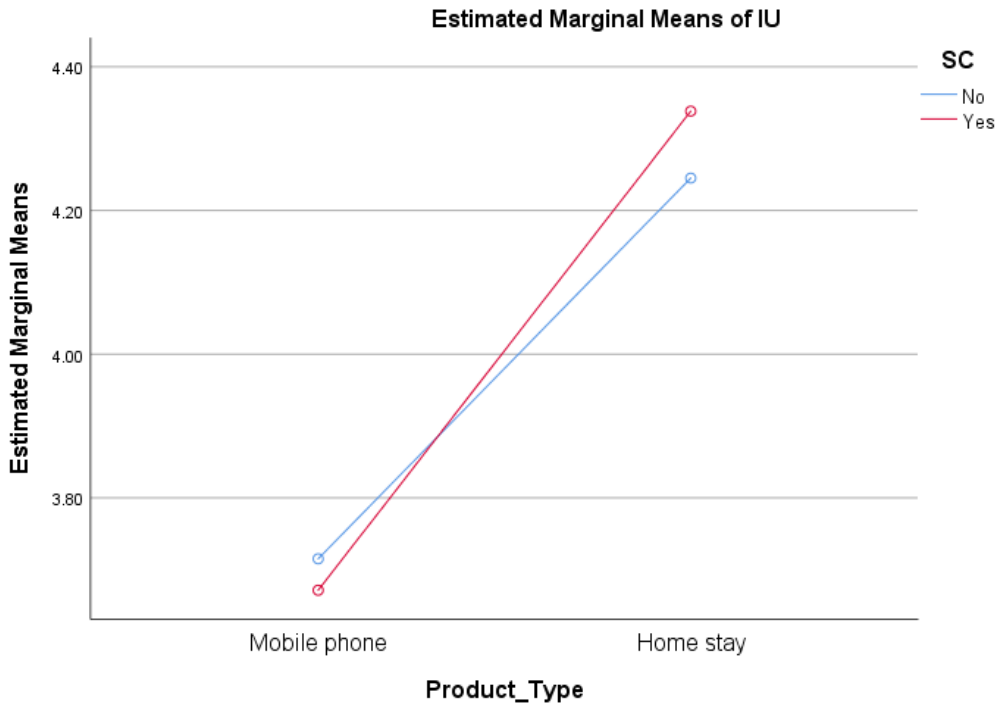
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	176.217[a]	3	58.739	26.962	.000
Intercept	30937.797	1	30937.797	14201.139	.000
SC	.297	1	.297	.136	.712
Product_Type	173.684	1	173.684	79.725	.000
SC * Product_Type	2.273	1	2.273	1.043	.307
Error	4219.839	1937	2.179		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .040 (Adjusted R Squared = .039)

Profile Plots

Figure 4- 4: SC → IU: Moderating Effect of Product Type



H6A

Table 4- 18: ANOVA Table SE → IU: Moderating Effect of Product Type

Descriptive Statistics

Dependent Variable: IU

SE	Product_Type	Mean	Std. Deviation	N
No	Mobile phone	3.6701	1.62142	488
	Home stay	4.1898	1.27577	483
	Total	3.9286	1.48198	971
Yes	Mobile phone	3.7165	1.71185	488
	Home stay	4.3935	1.22340	482
	Total	4.0529	1.52657	970
Total	Mobile phone	3.6933	1.66656	976
	Home stay	4.2915	1.25339	965
	Total	3.9907	1.50533	1941

Table 4- 19: ANOVA Table SE → IU: Moderating Effect of Product Type

Tests of Between-Subjects Effects

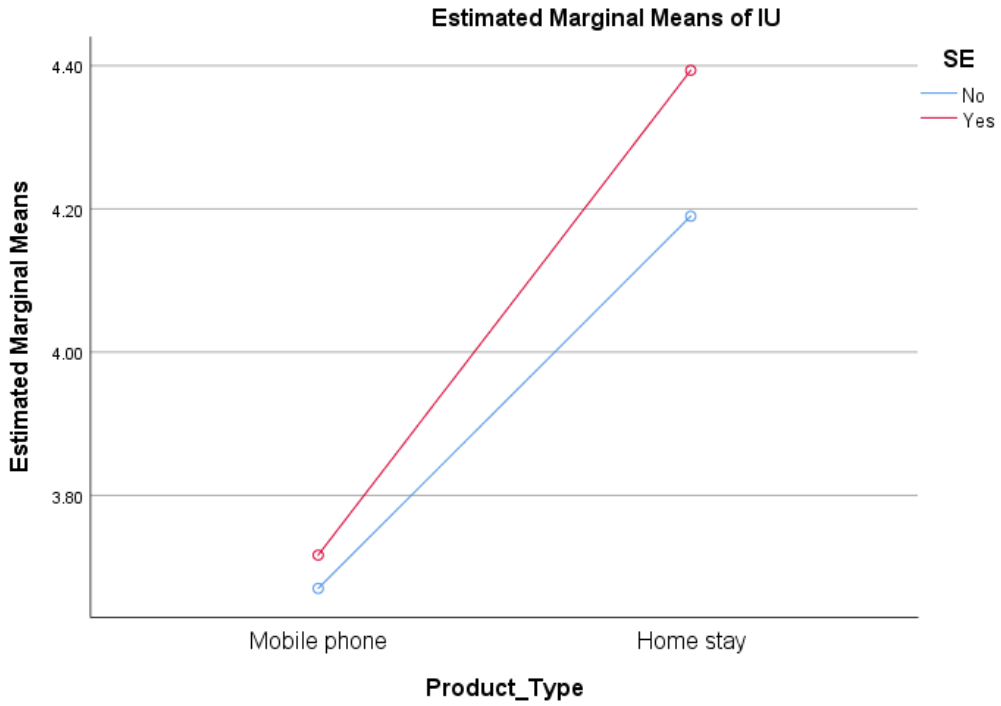
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	184.194[a]	3	61.398	28.236	.000
Intercept	30938.241	1	30938.241	14228.240	.000
SE	7.592	1	7.592	3.491	.062
Product_Type	173.717	1	173.717	79.891	.000
SE * Product_Type	3.000	1	3.000	1.380	.240
Error	4211.861	1937	2.174		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .042 (Adjusted R Squared = .040)

Profile Plots

Figure 4- 5: SE → IU: Moderating Effect of Product Type



Effect of Prior Knowledge:

Table 4- 20: Moderating Effects of Prior Knowledge

Hypothesis	Factor	Variable	Finding	Result
H1B	NIC	Information Diagnosticity	Not Significant	
H2B	NIC	Information Usefulness	Not Significant	
H3B	AQ	Information Usefulness	Significant	High Prior knowledge, AQ High
H4B	IR	Information Usefulness	Not Significant	
H5B	SC	Information Usefulness	Not Significant	
H6B	SE	Information Usefulness	Not Significant	

Interaction effect of Prior knowledge with Argument Quality was significant for Information Usefulness. The results showed a higher effect in case of Prior Knowledge (Search)* AQ (High).

H1B

Table 4- 21: ANOVA Table NIC → ID: Moderating Effect of Prior Knowledge

Descriptive Statistics

Dependent Variable: ID

NIC	PriorKnowledge	Mean	Std. Deviation	N
No	Low	2.8194	1.40576	48
	Medium	3.4721	1.48827	305
	High	3.6828	1.51566	618
	Total	3.5740	1.51332	971
Yes	Low	4.0069	1.48513	48
	Medium	4.2840	1.38306	304
	High	4.3047	1.37355	618
	Total	4.2835	1.38220	970
Total	Low	3.4132	1.55728	96
	Medium	3.8774	1.49191	609
	High	3.9938	1.47885	1236
	Total	3.9286	1.49173	1941

Table 4- 22: ANOVA Table NIC → ID: Moderating Effect of Prior Knowledge

Tests of Between-Subjects Effects

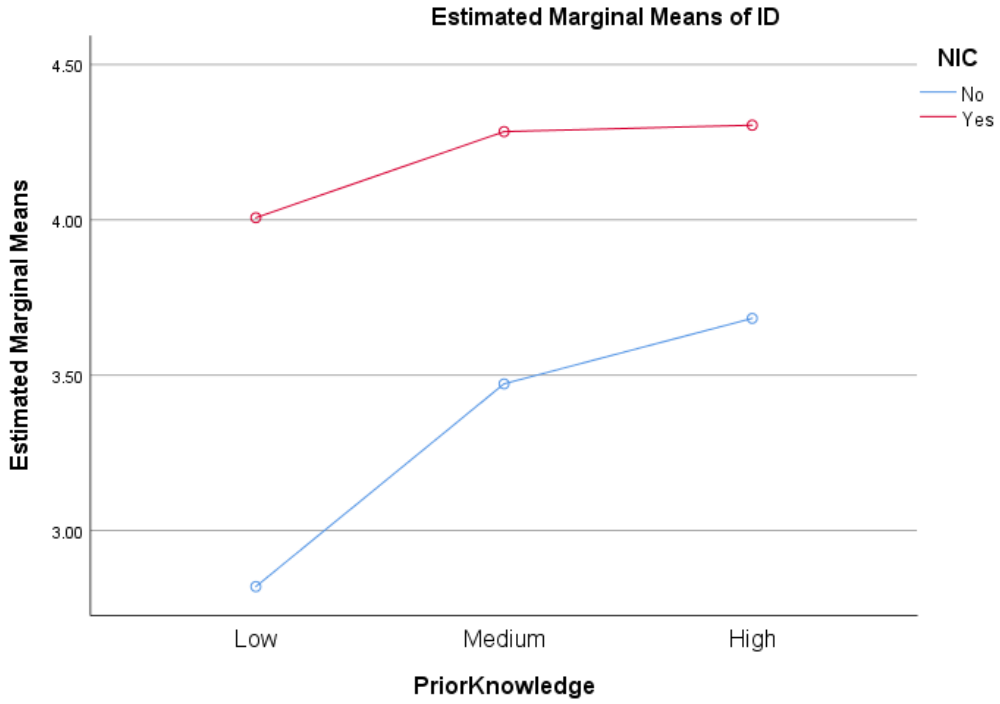
Dependent Variable: ID

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	286.055[a]	5	57.211	27.463	.000
Intercept	9897.009	1	9897.009	4750.944	.000
NIC	133.492	1	133.492	64.081	.000
PriorKnowledge	32.311	2	16.155	7.755	.000
NIC * PriorKnowledge	9.450	2	4.725	2.268	.104
Error	4030.928	1935	2.083		
Total	34273.556	1941			
Corrected Total	4316.982	1940			

a. R Squared = .066 (Adjusted R Squared = .064)

Profile Plots

Figure 4- 6: NIC → ID: Moderating Effect of Prior Knowledge



H2B

Table 4- 23: ANOVA Table NIC → IU: Moderating Effect of Prior Knowledge

Descriptive Statistics

Dependent Variable: IU

NIC	PriorKnowledge	Mean	Std. Deviation	N
No	Low	3.1458	1.54966	48
	Medium	3.5263	1.53866	304
	High	3.7792	1.55924	619
	Total	3.6687	1.55966	971
Yes	Low	3.9444	1.62040	48
	Medium	4.3202	1.36882	304
	High	4.3382	1.35748	618
	Total	4.3131	1.37614	970
Total	Low	3.5451	1.62734	96
	Medium	3.9232	1.50828	608
	High	4.0585	1.48784	1237
	Total	3.9907	1.50533	1941

Table 4- 24: ANOVA Table NIC → IU: Moderating Effect of Prior Knowledge

Tests of Between-Subjects Effects

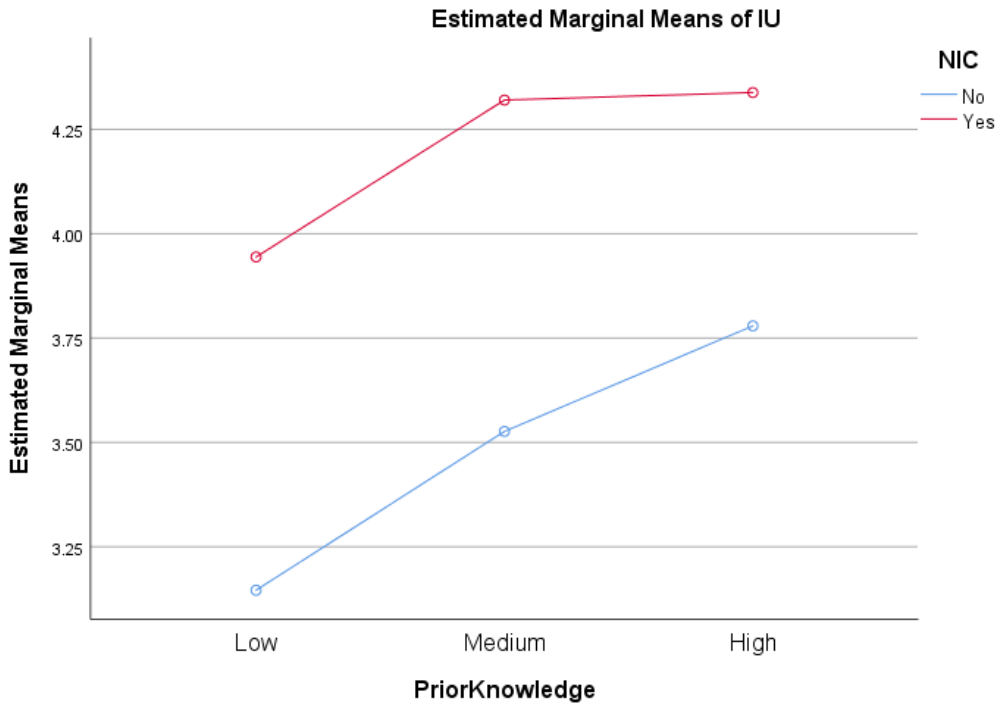
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	235.232[a]	5	47.046	21.879	.000
Intercept	10324.448	1	10324.448	4801.407	.000
NIC	89.914	1	89.914	41.815	.000
PriorKnowledge	27.545	2	13.772	6.405	.002
NIC * PriorKnowledge	6.223	2	3.111	1.447	.236
Error	4160.824	1935	2.150		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .054 (Adjusted R Squared = .051)

Profile Plots

Figure 4- 7: NIC → IU: Moderating Effect of Prior Knowledge



H3B

Table 4- 25: ANOVA Table AQ → IU: Moderating Effect of Prior Knowledge

Descriptive Statistics

Dependent Variable: IU

AQ	PriorKnowledge	Mean	Std. Deviation	N
No	Low	3.6111	1.60721	48
	Medium	3.8103	1.51445	304
	High	3.7948	1.51740	619
	Total	3.7906	1.51996	971
Yes	Low	3.4792	1.66156	48
	Medium	4.0362	1.49604	304
	High	4.3225	1.41022	618
	Total	4.1911	1.46414	970
Total	Low	3.5451	1.62734	96
	Medium	3.9232	1.50828	608
	High	4.0585	1.48784	1237
	Total	3.9907	1.50533	1941

Table 4- 26: ANOVA Table AQ → IU: Moderating Effect of Prior Knowledge

Tests of Between-Subjects Effects

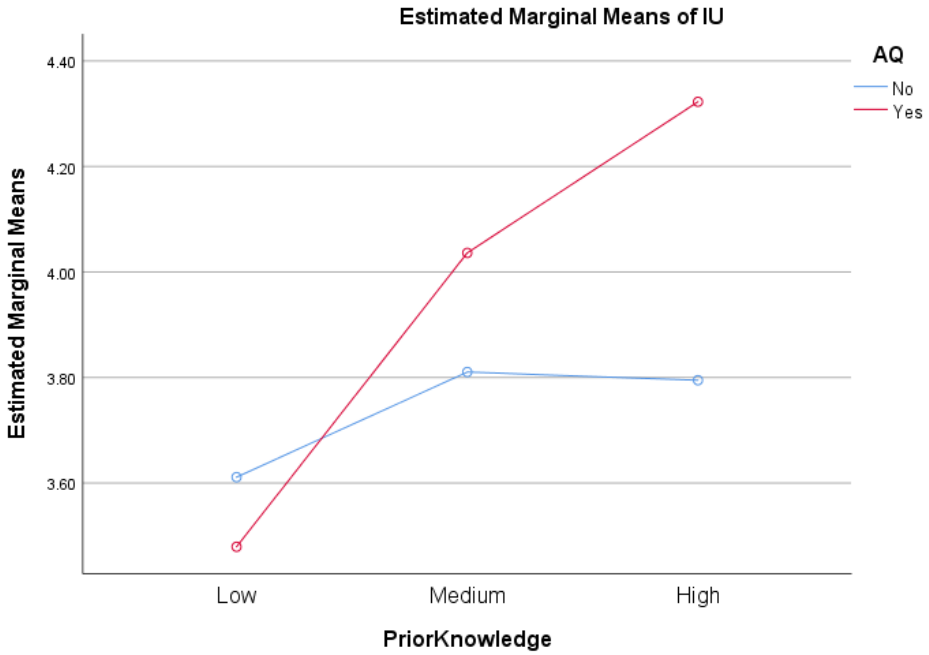
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	121.801[a]	5	24.360	11.028	.000
Intercept	10324.425	1	10324.425	4673.976	.000
AQ	7.507	1	7.507	3.398	.065
PriorKnowledge	27.543	2	13.771	6.234	.002
AQ * PriorKnowledge	16.444	2	8.222	3.722	.024
Error	4274.254	1935	2.209		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .028 (Adjusted R Squared = .025)

Profile Plots

Figure 4- 8: AQ → IU: Moderating Effect of Prior Knowledge



H4B

Table 4- 27: ANOVA Table IR → IU: Moderating Effect of Prior Knowledge

Descriptive Statistics

Dependent Variable: IU

IR	PriorKnowledge	Mean	Std. Deviation	N
No	Low	3.5694	1.61107	48
	Medium	3.9463	1.46879	304
	High	3.9984	1.52499	619
	Total	3.9609	1.51323	971
Yes	Low	3.5208	1.66014	48
	Medium	3.9002	1.54883	304
	High	4.1187	1.44842	618
	Total	4.0206	1.49755	970
Total	Low	3.5451	1.62734	96
	Medium	3.9232	1.50828	608
	High	4.0585	1.48784	1237
	Total	3.9907	1.50533	1941

Table 4- 28: ANOVA Table IR → IU: Moderating Effect of Prior Knowledge

Tests of Between-Subjects Effects

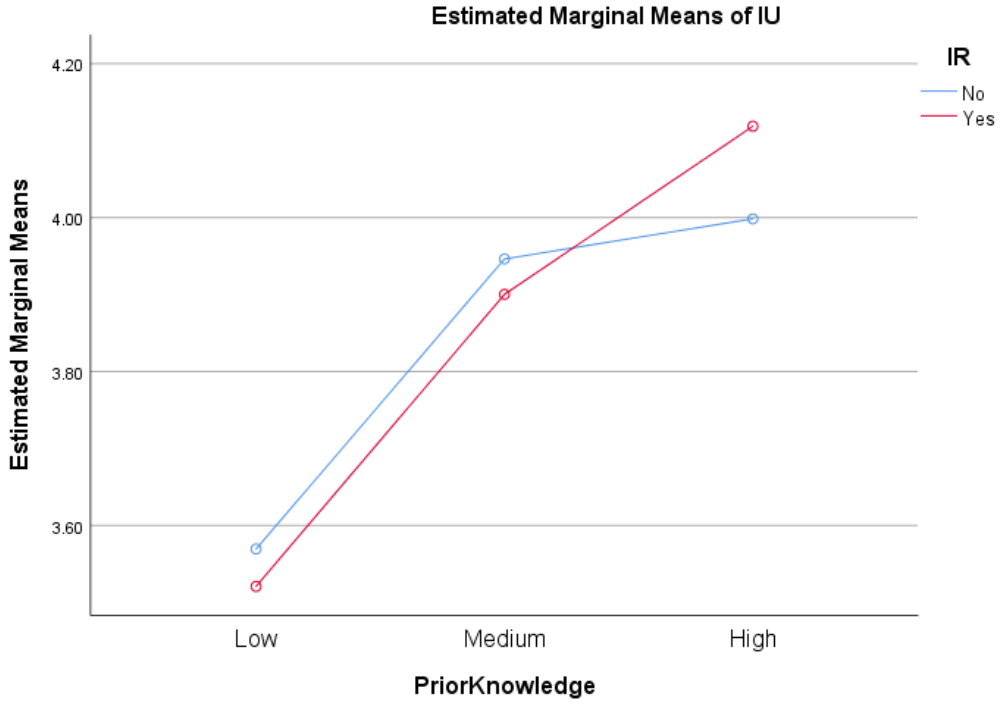
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	32.360[a]	5	6.472	2.870	.014
Intercept	10324.130	1	10324.130	4578.044	.000
IR	.013	1	.013	.006	.940
PriorKnowledge	27.515	2	13.758	6.101	.002
IR * PriorKnowledge	3.116	2	1.558	.691	.501
Error	4363.695	1935	2.255		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .007 (Adjusted R Squared = .005)

Profile Plots

Figure 4- 9: IR → IU: Moderating Effect of Prior Knowledge



H5B

Table 4- 29: ANOVA Table SC → IU: Moderating Effect of Prior Knowledge

Descriptive Statistics

Dependent Variable: IU

SC	PriorKnowledge	Mean	Std. Deviation	N
No	Low	3.4931	1.59193	48
	Medium	3.8969	1.48219	304
	High	4.0565	1.45193	619
	Total	3.9787	1.47301	971
Yes	Low	3.5972	1.67721	48
	Medium	3.9496	1.53591	304
	High	4.0604	1.52414	618
	Total	4.0027	1.53766	970
Total	Low	3.5451	1.62734	96
	Medium	3.9232	1.50828	608
	High	4.0585	1.48784	1237
	Total	3.9907	1.50533	1941

Table 4- 30: ANOVA Table SC → IU: Moderating Effect of Prior Knowledge

Tests of Between-Subjects Effects

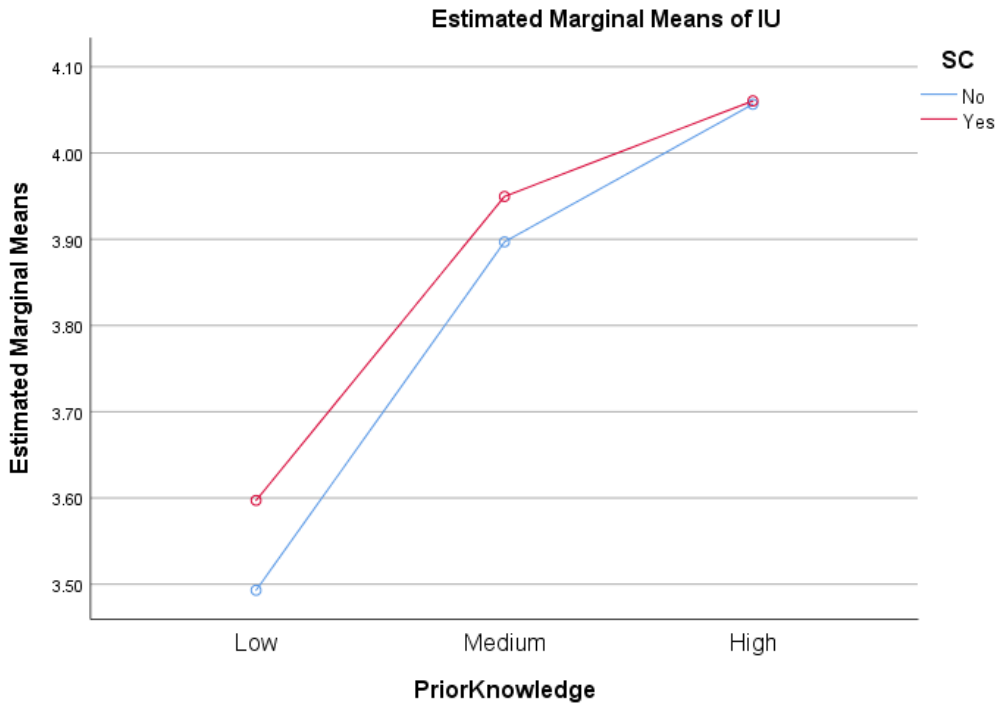
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	28.193[a]	5	5.639	2.498	.029
Intercept	10324.046	1	10324.046	4573.640	.000
SC	.501	1	.501	.222	.637
PriorKnowledge	27.507	2	13.754	6.093	.002
SC * PriorKnowledge	.404	2	.202	.090	.914
Error	4367.862	1935	2.257		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .006 (Adjusted R Squared = .004)

Profile Plots

Figure 4- 10: SC → IU: Moderating Effect of Prior Knowledge



H6B

Table 4- 31: ANOVA Table SE → IU: Moderating Effect of Prior Knowledge

Descriptive Statistics

Dependent Variable: IU

SE	PriorKnowledge	Mean	Std. Deviation	N
No	Low	3.5417	1.72401	48
	Medium	3.9035	1.51324	304
	High	3.9709	1.44386	619
	Total	3.9286	1.48198	971
Yes	Low	3.5486	1.54291	48
	Medium	3.9430	1.50553	304
	High	4.1462	1.52677	618
	Total	4.0529	1.52657	970
Total	Low	3.5451	1.62734	96
	Medium	3.9232	1.50828	608
	High	4.0585	1.48784	1237
	Total	3.9907	1.50533	1941

Table 4- 32: ANOVA Table SE → IU: Moderating Effect of Prior Knowledge

Tests of Between-Subjects Effects

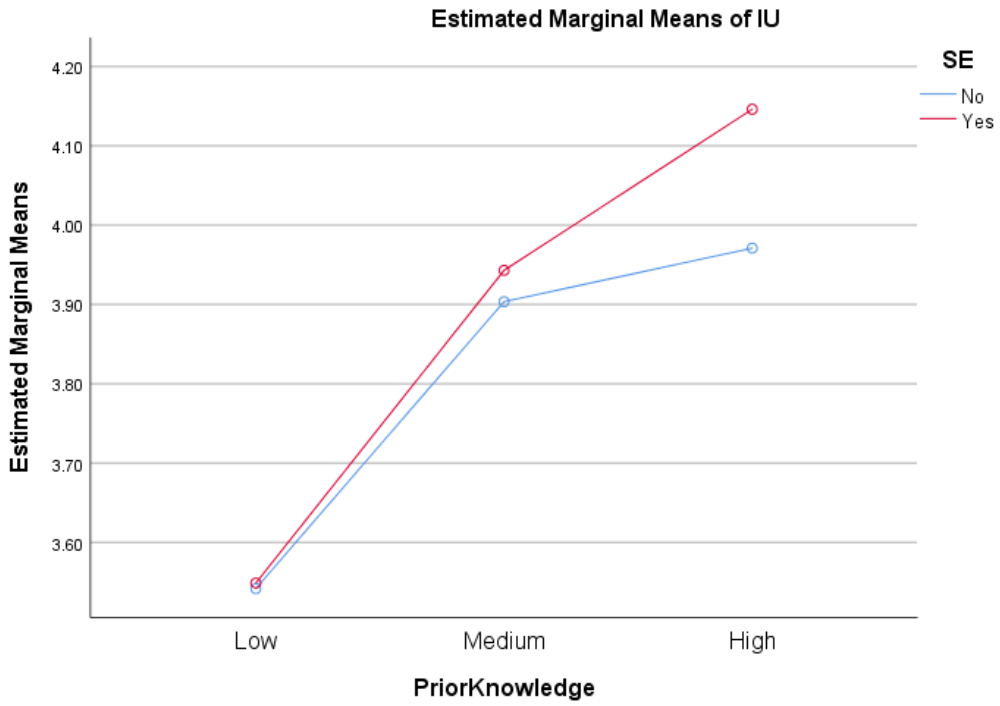
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	37.243[a]	5	7.449	3.307	.006
Intercept	10324.170	1	10324.170	4583.191	.000
SE	.954	1	.954	.424	.515
PriorKnowledge	27.519	2	13.759	6.108	.002
SE * PriorKnowledge	2.227	2	1.114	.494	.610
Error	4358.813	1935	2.253		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .008 (Adjusted R Squared = .006)

Profile Plots

Figure 4- 11: SE → IU: Moderating Effect of Prior Knowledge



Effect of Purchase Decision Involvement:

Table 4- 33: Moderating Effect of Purchase Decision Involvement

Hypothesis	Factor	Variable	Finding	Result
H1C	NIC	Information Diagnosticity	Significant	High Involvement, NIC YES
H2C	NIC	Information Usefulness	Significant	High Involvement, NIC YES
H3C	AQ	Information Usefulness	Not Significant	
H4C	IR	Information Usefulness	Not Significant	
H5C	SC	Information Usefulness	Not Significant	
H6C	SE	Information Usefulness	Not Significant	

Interaction effect of Purchase Decision Involvement with Need information congruence was significant for Information Diagnosticity. The results showed a higher effect in case of Purchase Decision Involvement (High)*NIC (Yes).

Interaction effect of Purchase Decision Involvement with Need information congruence was significant for Information Usefulness. The results showed a higher effect in case of Purchase Decision Involvement (High)*NIC (Yes).

H1C

Table 4- 34: ANOVA Table NIC → ID: Moderating Effect of Purchase Decision Involvement

Descriptive Statistics

Dependent Variable: ID

NIC	Involvement	Mean	Std. Deviation	N
No	Low	3.0000	.47140	2
	Medium	3.5461	1.48979	94
	High	3.5783	1.51803	875
	Total	3.5740	1.51332	971
Yes	Low	3.0000	.00000	2
	Medium	3.6418	1.53357	94
	High	4.3555	1.34787	874
	Total	4.2835	1.38220	970
Total	Low	3.0000	.27217	4
	Medium	3.5940	1.50855	188
	High	3.9666	1.48682	1749
	Total	3.9286	1.49173	1941

Table 4- 35: ANOVA Table NIC → ID: Moderating Effect of Purchase Decision Involvement

Tests of Between-Subjects Effects

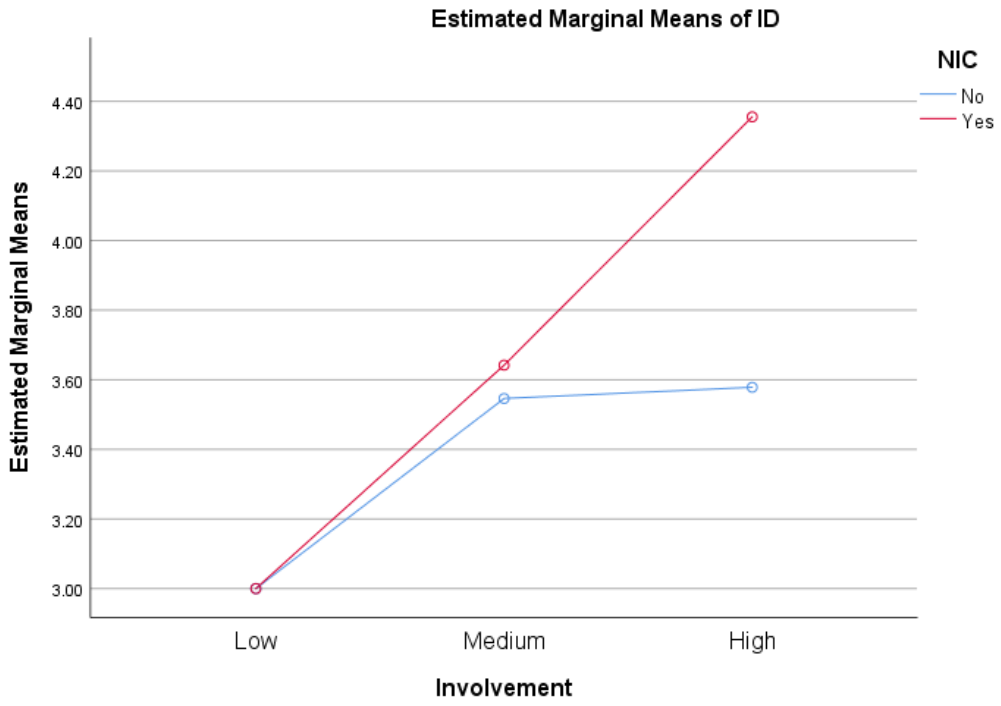
Dependent Variable: ID

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	291.558[a]	5	58.312	28.030	.000
Intercept	435.855	1	435.855	209.513	.000
NIC	.744	1	.744	.358	.550
Involvement	27.062	2	13.531	6.504	.002
NIC * Involvement	20.210	2	10.105	4.857	.008
Error	4025.424	1935	2.080		
Total	34273.556	1941			
Corrected Total	4316.982	1940			

a. R Squared = .068 (Adjusted R Squared = .065)

Profile Plots

Figure 4- 12: NIC → ID: Moderating Effect of Purchase Decision Involvement



H2C

Table 4- 36: ANOVA Table NIC → IU: Moderating Effect of Purchase Decision Involvement

Descriptive Statistics

Dependent Variable: IU

NIC	Involvement	Mean	Std. Deviation	N
No	Low	3.1667	.23570	2
	Medium	3.7128	1.45305	94
	High	3.6651	1.57296	875
	Total	3.6687	1.55966	971
Yes	Low	3.1667	.23570	2
	Medium	3.8156	1.49281	94
	High	4.3692	1.35341	874
	Total	4.3131	1.37614	970
Total	Low	3.1667	.19245	4
	Medium	3.7642	1.47002	188
	High	4.0170	1.50861	1749
	Total	3.9907	1.50533	1941

Table 4- 37: ANOVA Table NIC → IU: Moderating Effect of Purchase Decision Involvement

Tests of Between-Subjects Effects

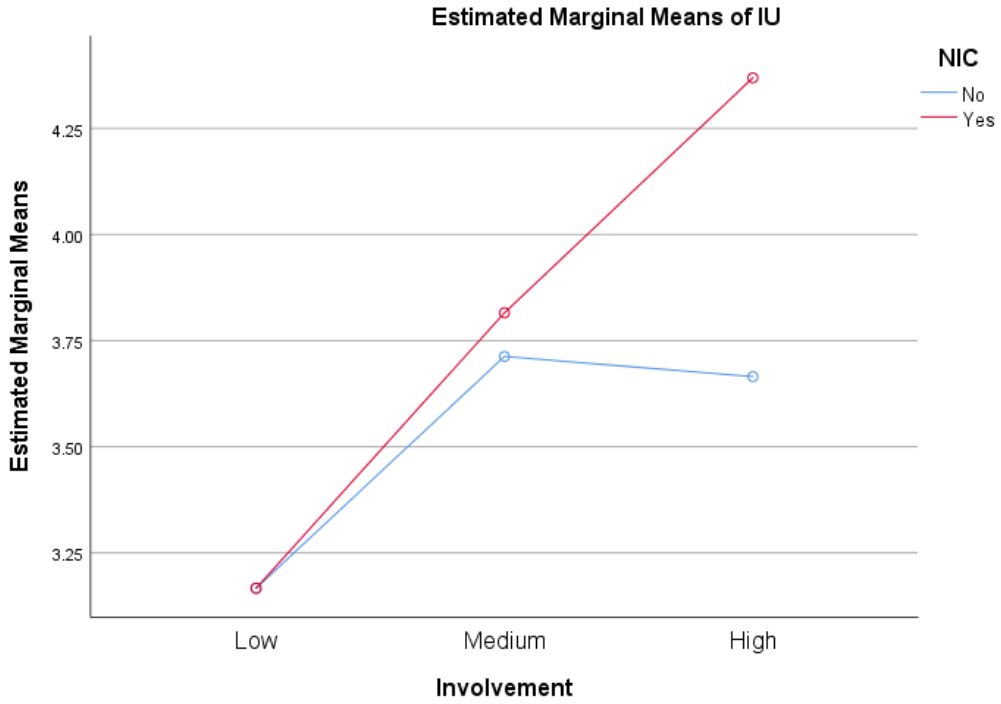
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	230.799[a]	5	46.160	21.444	.000
Intercept	468.399	1	468.399	217.598	.000
NIC	.636	1	.636	.295	.587
Involvement	13.587	2	6.794	3.156	.043
NIC * Involvement	15.755	2	7.878	3.660	.026
Error	4165.256	1935	2.153		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .053 (Adjusted R Squared = .050)

Profile Plots

Figure 4- 13: NIC → IU: Moderating Effect of Purchase Decision Involvement



H3C

Table 4- 38: ANOVA Table AQ → IU: Moderating Effect of Purchase Decision Involvement

Descriptive Statistics

Dependent Variable: IU

AQ	Involvement	Mean	Std. Deviation	N
No	Low	3.1667	.23570	2
	Medium	3.6667	1.42011	94
	High	3.8053	1.53187	875
	Total	3.7906	1.51996	971
Yes	Low	3.1667	.23570	2
	Medium	3.8617	1.51961	94
	High	4.2288	1.45529	874
	Total	4.1911	1.46414	970
Total	Low	3.1667	.19245	4
	Medium	3.7642	1.47002	188
	High	4.0170	1.50861	1749
	Total	3.9907	1.50533	1941

Table 4- 39: ANOVA Table AQ → IU: Moderating Effect of Purchase Decision Involvement

Tests of Between-Subjects Effects

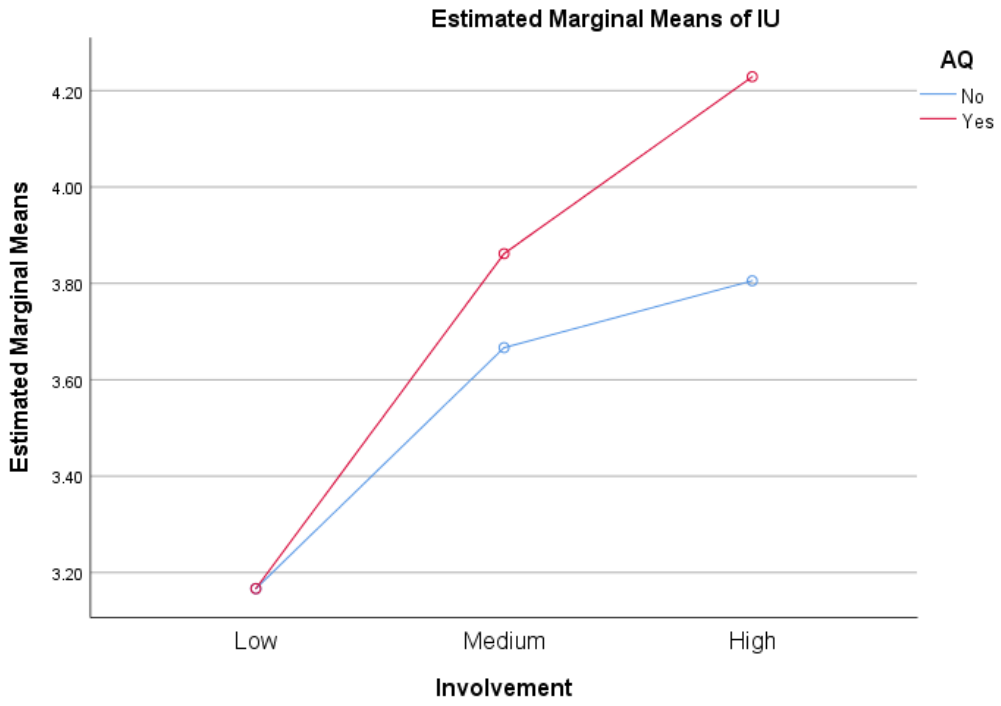
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	93.778[a]	5	18.756	8.436	.000
Intercept	468.392	1	468.392	210.665	.000
AQ	.374	1	.374	.168	.682
Involvement	13.580	2	6.790	3.054	.047
AQ * Involvement	2.376	2	1.188	.534	.586
Error	4302.277	1935	2.223		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .021 (Adjusted R Squared = .019)

Profile Plots

Figure 4- 14: AQ → IU: Moderating Effect of Purchase Decision Involvement



H4C

Table 4- 40: ANOVA Table IR → IU: Moderating Effect of Purchase Decision Involvement

Descriptive Statistics

Dependent Variable: IU

IR	Involvement	Mean	Std. Deviation	N
No	Low	3.1667	.23570	2
	Medium	3.8440	1.38321	94
	High	3.9752	1.52795	875
	Total	3.9609	1.51323	971
Yes	Low	3.1667	.23570	2
	Medium	3.6844	1.55533	94
	High	4.0587	1.48870	874
	Total	4.0206	1.49755	970
Total	Low	3.1667	.19245	4
	Medium	3.7642	1.47002	188
	High	4.0170	1.50861	1749
	Total	3.9907	1.50533	1941

Table 4- 41: Table 4- 42: ANOVA Table IR → IU: Moderating Effect of Purchase Decision Involvement

Tests of Between-Subjects Effects

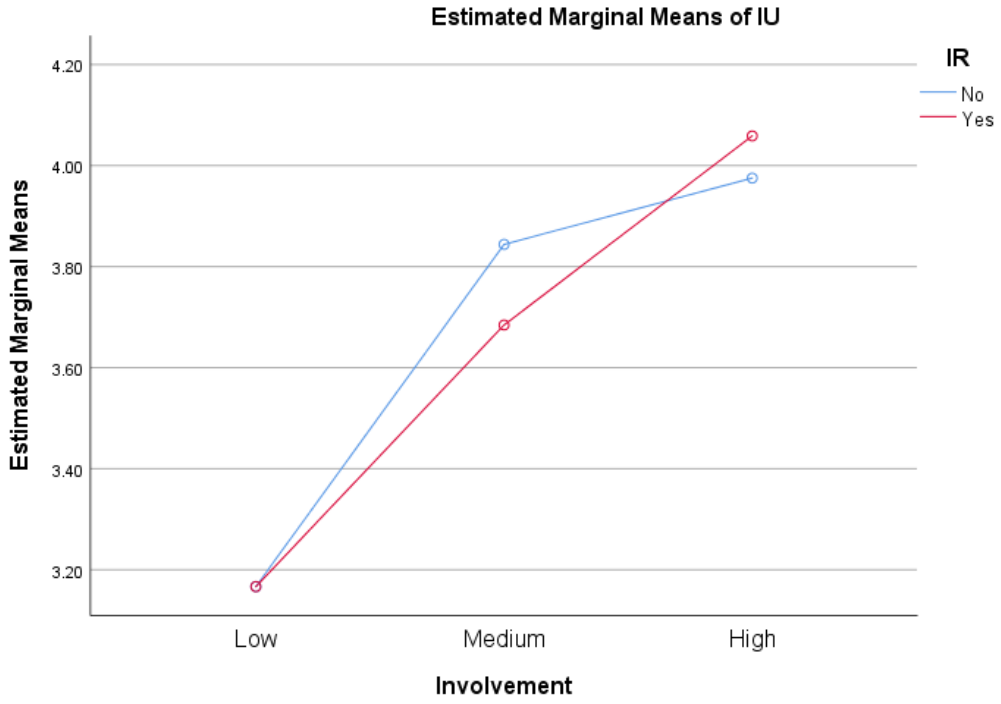
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	17.814[a]	5	3.563	1.575	.164
Intercept	468.384	1	468.384	207.006	.000
IR	.006	1	.006	.002	.960
Involvement	13.571	2	6.785	2.999	.050
IR * Involvement	2.511	2	1.255	.555	.574
Error	4378.242	1935	2.263		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .004 (Adjusted R Squared = .001)

Profile Plots

Figure 4- 15: IR → IU: Moderating Effect of Purchase Decision Involvement



H5C

Table 4- 43: ANOVA Table SC → IU: Moderating Effect of Purchase Decision Involvement

Descriptive Statistics

Dependent Variable: IU

SC	Involvement	Mean	Std. Deviation	N
No	Low	3.1667	.23570	2
	Medium	3.6596	1.40912	94
	High	4.0149	1.47749	875
	Total	3.9787	1.47301	971
Yes	Low	3.1667	.23570	2
	Medium	3.8688	1.52887	94
	High	4.0191	1.53998	874
	Total	4.0027	1.53766	970
Total	Low	3.1667	.19245	4
	Medium	3.7642	1.47002	188
	High	4.0170	1.50861	1749
	Total	3.9907	1.50533	1941

Table 4- 44: ANOVA Table SC → IU: Moderating Effect of Purchase Decision Involvement

Tests of Between-Subjects Effects

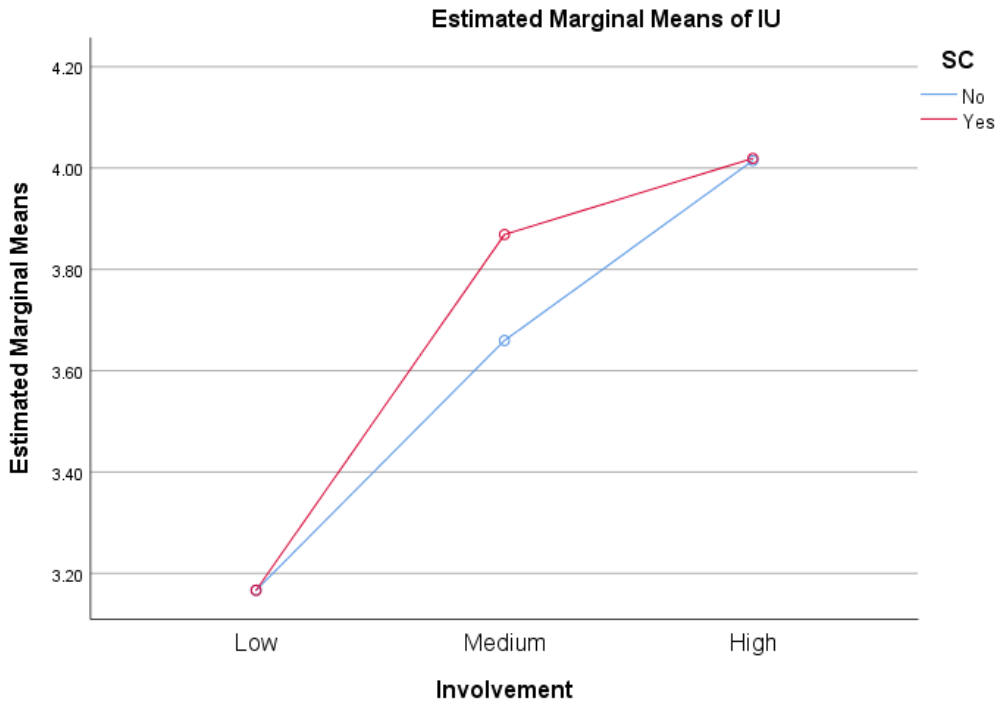
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	15.634[a]	5	3.127	1.381	.228
Intercept	468.382	1	468.382	206.902	.000
SC	.045	1	.045	.020	.889
Involvement	13.569	2	6.784	2.997	.050
SC * Involvement	1.784	2	.892	.394	.674
Error	4380.422	1935	2.264		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .004 (Adjusted R Squared = .001)

Profile Plots

Figure 4- 16: SC → IU: Moderating Effect of Purchase Decision Involvement



H6C

Table 4- 45: ANOVA Table SE → IU: Moderating Effect of Purchase Decision Involvement

Descriptive Statistics

Dependent Variable: IU

SE	Involvement	Mean	Std. Deviation	N
No	Low	3.0000	.00000	2
	Medium	3.7163	1.49148	94
	High	3.9535	1.48100	875
	Total	3.9286	1.48198	971
Yes	Low	3.3333	.00000	2
	Medium	3.8121	1.45466	94
	High	4.0805	1.53397	874
	Total	4.0529	1.52657	970
Total	Low	3.1667	.19245	4
	Medium	3.7642	1.47002	188
	High	4.0170	1.50861	1749
	Total	3.9907	1.50533	1941

Table 4- 46: ANOVA Table SE → IU: Moderating Effect of Purchase Decision Involvement

Tests of Between-Subjects Effects

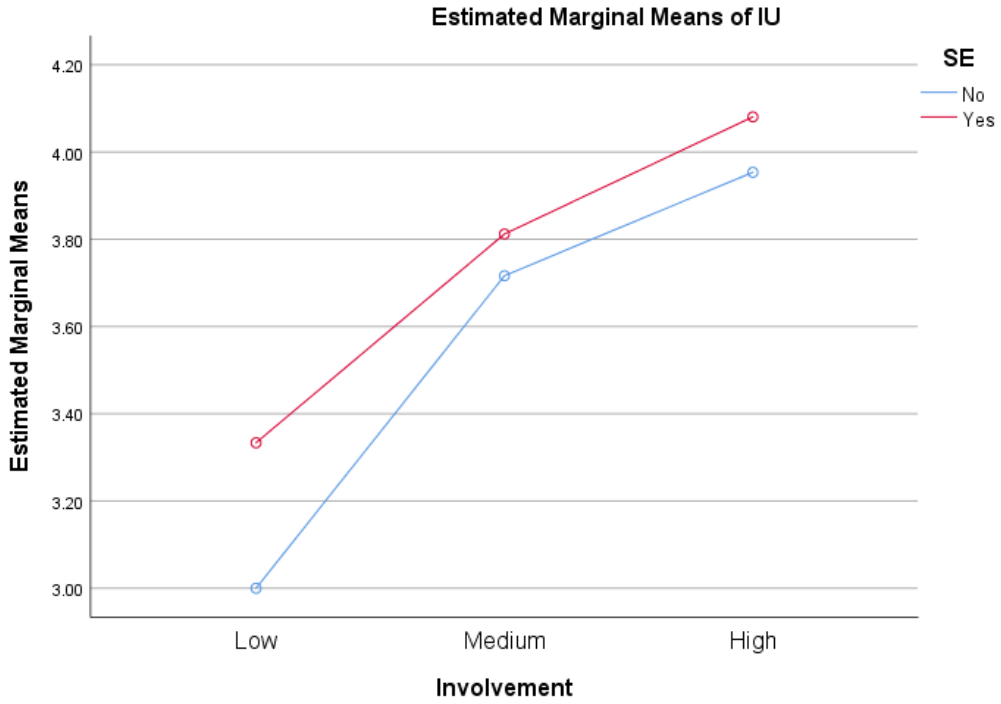
Dependent Variable: IU

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	21.157[a]	5	4.231	1.872	.096
Intercept	468.385	1	468.385	207.165	.000
SE	.302	1	.302	.134	.715
Involvement	13.572	2	6.786	3.001	.050
SE * Involvement	.085	2	.043	.019	.981
Error	4374.898	1935	2.261		
Total	35308.222	1941			
Corrected Total	4396.055	1940			

a. R Squared = .005 (Adjusted R Squared = .002)

Profile Plots

Figure 4- 17: SE → IU: Moderating Effect of Purchase Decision Involvement



4.2.3 Interpreting Statistics from Path Analysis

The relationship between the dependent variables was tested using a path analysis.

Hypothesis: Information Usefulness partially mediates the relationship between Information Diagnosticity & Review Acceptance.

Figure 4- 18: Path Analysis and Factor Loadings

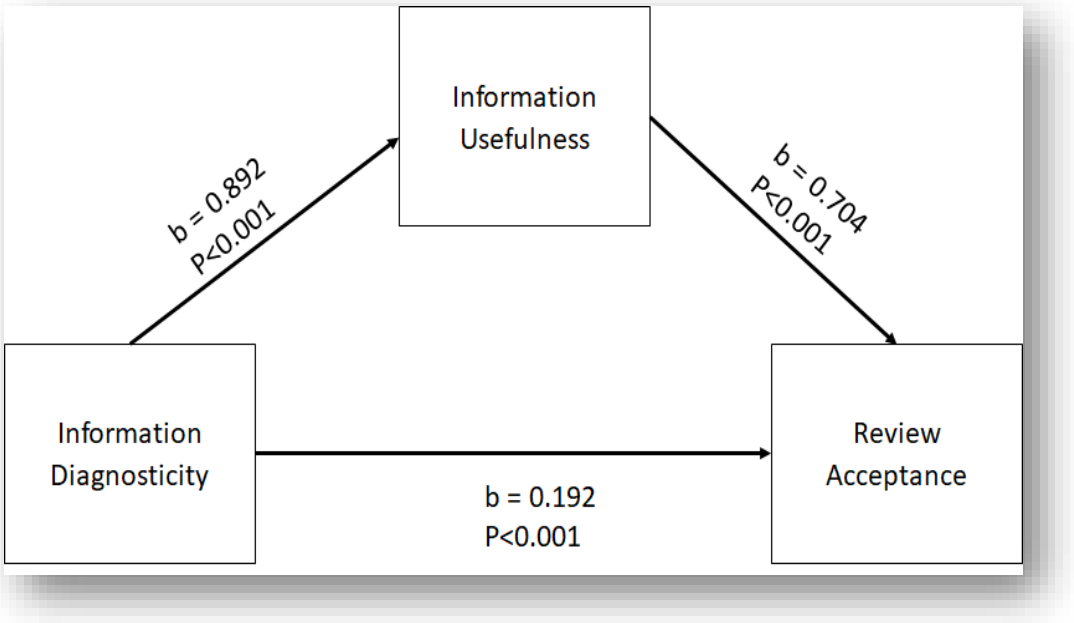


Table 4- 47: Results of significance test for paths of the model

Path			Path Coeff.	S.E.	C.R.	P
Inforusefulness	**<---**	**InforDiagnosticity**	**0.892**	**0.011**	**83.068**	*******
ReviewAcceptance	**<---**	**InforDiagnosticity**	**0.192**	**0.022**	**8.759**	*******
ReviewAcceptance	**<---**	**Inforusefulness**	**0.704**	**0.022**	**32.347**	*******

As seen above, both the direct as well as the indirect effects are significant. Moreover, the indirect effect is stronger than the direct effect. Thus, it can be concluded that IU partially mediates the relationship between ID & RA.

CHAPTER 5: DISCUSSION & CONCLUSIONS

5.1 Discussion

We set out on this research to understand the factors affecting 'Acceptance' of eWOM. We additionally wanted to examine the product types as well as the consumer's personal characteristics to be able to generate a holistic framework for understanding the factors that affect 'Information Usefulness' leading to 'Review Acceptance'. The study was based on IAMM & ELM. We have classified the factors into Central & Peripheral Routes. We additionally included the factor 'Information Diagnosticity' and the antecedent 'Need Information Congruence'. The research attempts to create a review acceptance framework. The research identifies 'Information Diagnosticity' as a critical factor affecting 'Review Acceptance'. The findings suggest that the central route is significant whereas the peripheral route is not significant. This is a critical finding and seems to indicate that in the world of OPRs, where the cost of information search is so low, and any width and depth of review information can be found with just a few clicks, consumers review the information rather than depending on peripheral cues to make a judgement regarding the product fit.

Below are the research questions that formed the basis for the study.

R.Q.1: Which factors will influence information seekers' diagnosticity, usefulness & acceptance of OPRs?

The results confirm that all central route variables – 'Need Information Congruence', 'Argument Quality' & 'Immersive Review' affect 'Information Usefulness' leading to 'Review Acceptance'. The peripheral route variables – 'Source Credibility' & 'Source Expertise' did not emerge significant. This points to the reasoning that consumers go through a product evaluation process to arrive at a decision and the OPR mechanism enables the consumers to get this done with ease. The research also shows that the review information needs be diagnostic for the consumer to help him get information about his personal consumption needs. Review content which does not do this, is not 'Useful' and not 'Accepted'. 'Argument Quality' is important and a good argument supersedes the need for the review provider's trust markers such as 'Source Credibility', 'Source Expertise'. 'Immersive Reviews' emerged significant. This leads us to conclude that review quality information needs to be defined at a level deeper than 'Argument Quality' and also that 'Argument Quality' is not enough to indicate levels of the quality of the information content.

R.Q.2: Does the influence of a review of a product differ based on the product type?

Results show that 'Product Types' do moderate the relationship leading to 'Information Usefulness'. The factors 'Need Information Congruence' showed an interaction with Product Type and were higher for 'Search Good' leading to 'Information Usefulness'.

R.Q.3: To what extent do consumer's personal characteristics affect his diagnosticity & perceived usefulness leading to OPR acceptance?

The study considers the consumer's characteristics – Purchase decision Involvement & Prior Knowledge. These factors showed an interaction with a few of the variables.

A high involvement situation where the 'Need Information Congruence' was positive, led to a significantly higher 'Information Diagnosticity' as well as 'Information Usefulness'. This finding seems logical to what could be expected.

Prior Knowledge showed an interaction with Argument Quality leading to 'Information Usefulness'. This indicates that a customer who has prior knowledge of the product category will need a review content with a higher argument quality to find the review useful.

5.2 Theoretical Implications

Theoretically, the current research attempts to fill the current knowledge deficiency regarding the consumer's processing and usage of information from OPRs. The research attempts to create a review acceptance framework. OPRs have been studied from a purchase intent perspective. Whereas this study approaches it from an 'Acceptance' framework. Purchase Intent is not an ideal measure to evaluate OPR as an OPR is a content review posted by a past user/consumer in order to share his opinions/reviews of the product under consideration. This is not a marketer generated content where is output objective of the communication is Purchase Intent. If the OPR helps the consumer reading it, to arrive at a decision, the OPR has been successfully accepted. This is an important metric and has not been explored much in OPR literature.

This research extends the accessibility- Diagnosticity model to OPR research and validates the applicability. This research shows that consumers at looking for content that helps them understand the product features that are important to them. If the content is not diagnostic, the content will not be useful. Thus, the factor of information Diagnosticity as well as the antecedent – NIC emerge as being important in a review acceptance framework.

This research applies the Elaboration Likelihood Model (ELM) to the area of OPR to make it richer and validates it. The factors were evaluated for moderating effects of product types and consumers characteristics makes it a holistic analysis which contributes new insights to current literature on eWOM.

A significant contribution of this research is the factor Immersive Review. This factor attempts to qualify the OPR content quality beyond the widely studied and largely singular factor of Argument Quality and validates the same. With the gaining significance and wide and largely default usage of OPR, there is a need for further qualifiers for the content quality and the factor Argument Quality does not suffice for it. The factor 'Immersive Reviews' has emerged significant through this research and adds to existing theory. The correlation between the variables has been studied, however, this study uses causation through a factorial experiment to establish linkages between the factors.

5.3 Practical Implications

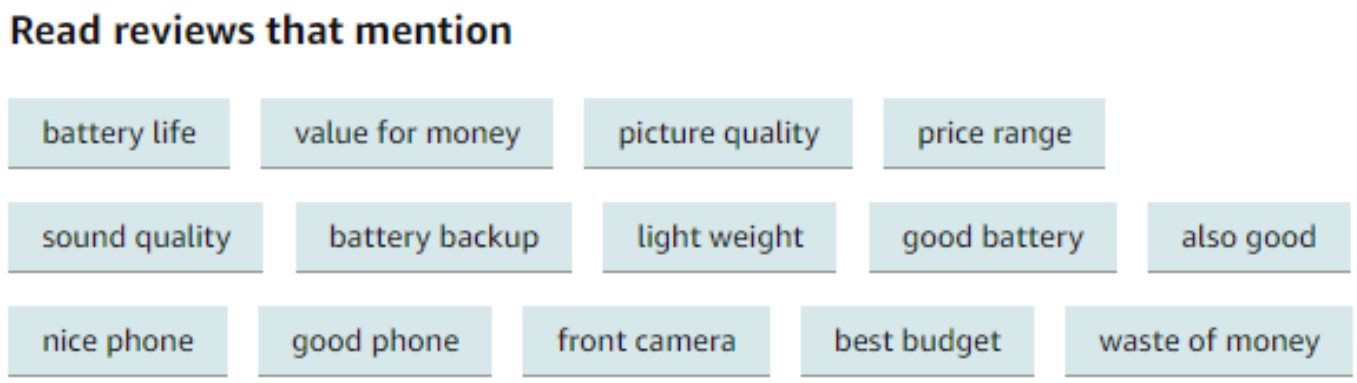
The findings from this study have significant value addition to OPRs both from an OPR design as well as generation perspective. Currently, there is no limit to the number of reviews that can be posted against a product as well as the reviews that show up against the product. However, a lot of these reviews might not necessarily be useful or contribute to the decision-making process of the consumer. Despite this, the consumer must wade through all that irrelevant information and non-useful reviews to be reach information that is helpful. This can potentially lead to a level of fatigue in decision making. The current study proposes a framework to understand the review factors that lead to the review being helpful and leading to acceptance. Thus, the ecommerce platform can analyze the entire review set to filter out the useful reviews and showcase a smaller set of curated reviews to the consumer along with the entire set to empower the consumer to be able to access the ones he wants to. Consumers can directly go through the helpful reviews without having to go through multiple pages embedded with reviews that are not helpful.

Figure 5- 1: Practical Implications

This research has shown that information Diagnosticity is very important to consumers. The consumer check for a fit between the information provided and their personal consumption needs. Information which is not diagnostic does not get accepted by the consumer to make a decision. Thus, the ecommerce platforms should ensure reviews can be filtered to reach the information needs of the consumer with minimum clicks and in minimum time. Additionally, at the input end, the fields that customer search information on which considering a product should be added on a continuous basis to the filter list.

Amongst the ecommerce platforms, Amazon.in has already started showing a list of filters to get to reviews which cover information on specific areas for a few product categories. This seems to be a good step in the direction of ensuring Need information congruence and information Diagnosticity. This needs to be implemented for all categories.

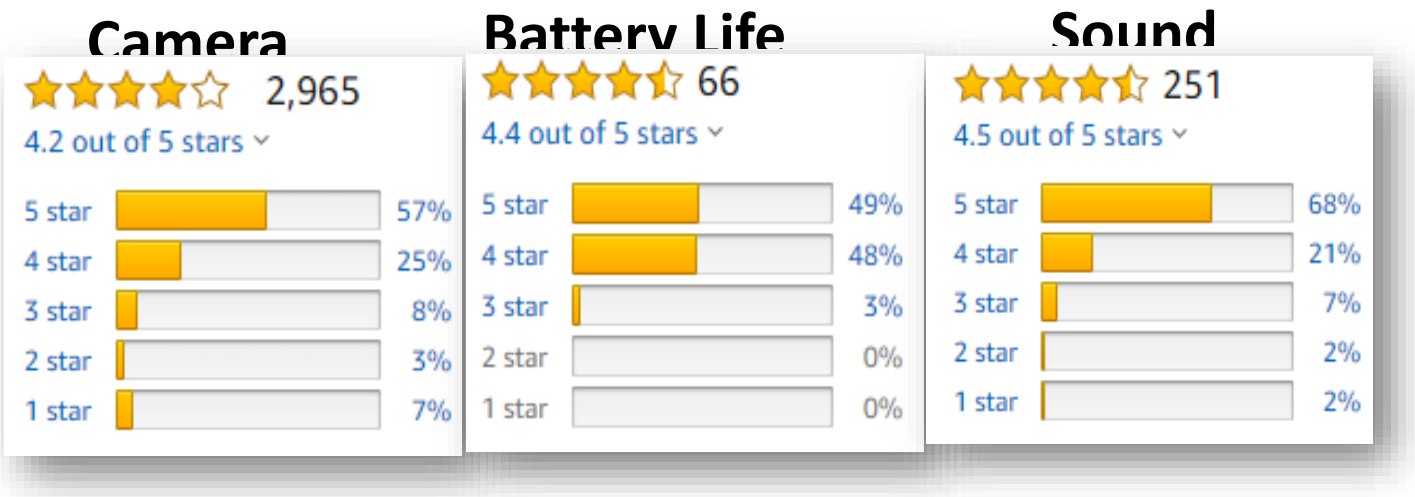
Figure 5- 2: Practical Implications



As an extension to the above finding, now that we know that Information Diagnosticity is an important attribute leading to acceptance, the ecommerce platform should design the OPRs to shown a visual rating scale for area-wise attributes/performance for the product. This would give the consumer a starting point to check the product performance in that particular area before deciding whether to even consider it or not. This saves his time and effort of having to read multiple reviews to arrive at a decision.

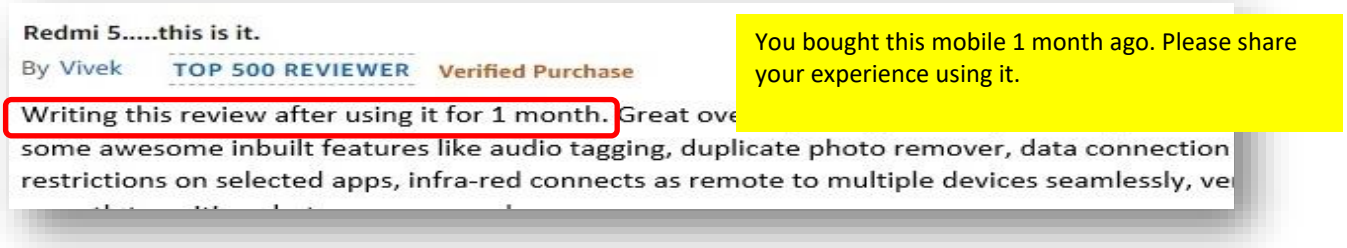
e.g. If a consumer is trying to evaluate a mobile phone and his main reason for wanting to upgrade from his existing phone is to have a better camera, the below shown rating scale which shows the visual rating for the camera performance of the phone will let him know whether to continue with reading more reviews of this phone or to move on to another product. This aids consumer decision making at the first level saving him a lot of time and effort.

Figure 5- 3: Practical Implications



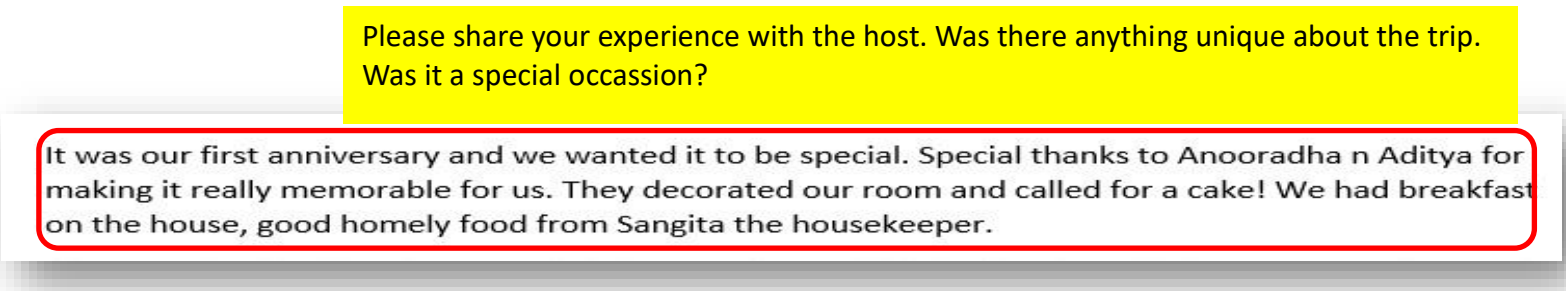
This research introduced the construct 'Immersive Review'. In literature, argument quality has been largely the only metric to measure review quality. There haven't been other qualifiers to identify the quality of the review content. Immersive Review has been found to be significant. Thus, ecommerce portals should enable the review framework to add this factor. In case of search products, a re-review after a period of usage should be introduced.

Figure 5- 4: Practical Implications


Redmi 5.....this is it.
By Vivek TOP 500 REVIEWER Verified Purchase
Writing this review after using it for 1 month. Great ove
some awesome inbuilt features like audio tagging, duplicate photo remover, data connection
restrictions on selected apps, infra-red connects as remote to multiple devices seamlessly, ve
You bought this mobile 1 month ago. Please share your experience using it.

In case of experience products fields to capture review content around immersive experience need to be added at a design level.

Figure 5- 5:Practical Implications


Please share your experience with the host. Was there anything unique about the trip. Was it a special occassion?
It was our first anniversary and we wanted it to be special. Special thanks to Anooradha n Aditya for making it really memorable for us. They decorated our room and called for a cake! We had breakfast on the house, good homely food from Sangita the housekeeper.

Ecommerce platforms should ensure that review generation is redesigned to encourage feedback on factors leading to Review Acceptance as mentioned below –

- Visual rating scale
- NIC factors
- Argument Quality factors
- Immersiveness factors

5.4 Limitations and potential for further research

The current research considers mobile phones & homestay as the products. The framework needs to be tested for other low involvement- low priced goods to see how they behave.

This research studied homestays (Airbnb.in) as the experience product. Airbnb.in is a vertical site. Other vertical ecommerce sites (Zomato, UrbanClap etc.) should be studied to find out if they behave similarly to the experience category studied.

The factor 'immersive review' needs to be explored in greater detail for experience goods category.

One of the limitations of the study was the use of only "positive reviews" while neutral-negative reviews were excluded. This was done to avoid the effect of negativity bias in the experimental design. Thus, further studies can be carried out to delve deeper into the domain of negative reviews and acceptance.

This study suggests several future research directions. To avoid negativity bias and to isolate any confounding effects, the current study considers only positive reviews. However, the real world of OPRs is balanced with negative reviews as well. Thus, it is an important area of research and might throw up some interesting results.

The research has tried to consider as many factors of OPR, however, some factors have had to be left out in the process of designing an experiment. These factors can be studied to generate new knowledge.

Mobile phones for search good & homestay for experience good was considered. However, the framework can be tested for other product categories within the said product types. Additionally, product types across involvement levels can be studied.

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Form

Hi There,

First, let me thank you for taking the time out to help a researcher gather some insights.

As a part of an academic research project, I am studying online purchase behaviour.

This survey will only take 14 minutes of your time. Really! We timed it 😊

And don't worry, your data will be used exclusively for academic purposes only, without disclosing your identity. That's a promise!

Regards,

Deepanvita.

Research Scholar (NMIMS Mumbai)

--> If you are using viewing this on your mobile phone, please use the landscape mode so that you can see all the options.

How many times did you purchase products over the Internet during last 6 months?

- Never
- Once
- 2-5 times
- 6-10 times
- More than 10 times
  <If never, survey ends>

Scenario

We have created a scenario that is given below. Please read it and then answer the questions that follow.

The Scenario:

You have decided to purchase a new mobile phone. You have gone through the various models online and browsed the listings on amazon.in.

You want the phone to meet the below two requirements and are looking for more information around these -

1. A fingerprint sensor that works properly.

2. Minimum lag time.

You have shortlisted a certain phone. To make your decision, you are reading through the reviews posted by previous buyers.

Please go through the reviews and answer the questions that follow. You will see 4 buyer reviews.

<Reviews>

Based on the above Review, please rate the below statements from Strongly Disagree to Strongly Agree (On a scale of 1 to 6)

Information Diagnosticity

1. This review helped me evaluate the phone
2. This review provided sufficient information around my requirements
3. This review let me know the performance of the phone for my requirements

Information Usefulness

1. This review will help me make a better decision
2. This review will make it easier for me to arrive at a decision
3. I found the review useful

Review Acceptance

1. I am likely to agree with what is written in this review
2. I am likely to take action based on what is written in this review
3. This review will influence my decision to choose this phone

Now that you have read all 4 reviews, please answer the following

Purchase Decision Involvement (On a scale of 1 to 6)

1. In selecting from the many mobile phones available in the market, would you say that:
   I would not care at all as to which one I choose ------ I would care a great deal as to which one I choose.
2. Do you think that the various types of mobile phones available in the market are all very alike or are all very different?
   They are alike ------ They are all different.
3. How important would it be for you to make a right choice of mobile phone?
   Not at all important ------ Extremely important
4. In making your selection of a mobile phone, how concerned would you be about the outcome of your choice?
   Not at all concerned ------ Very much concerned.

Prior Knowledge

1. Are you already well informed about mobile phone category? (On a scale of 1 to 6)

Did you take note of the presence of ‘Reviewer Status’? <dropdown options>

- Yes
- No
- Not Sure

Did the presence/absence of ‘Reviewer Status’ make a difference to your decision making? <dropdown options>

- Yes
- No

Did you take note of the presence of ‘Verification Status’? <dropdown options>

- Yes
- No
- Not Sure

Did the presence/absence of ‘Verification Status’ make a difference to your decision making? <dropdown options>

- Yes
- No

How often are you active online?

- Never
- Less than 1 hour a day
- 1-2 Hours a day
- 3-4 Hours a day
- more than 4 hours a day

Overall, were you satisfied with your previous online shopping experience?

- Yes/No

How often did you refer to reviews on a website before making a purchase in the past 6 months? <Never to Always>

In general, how helpful was that information in your purchase decision?

<’Not at all helpful’ to ‘very helpful’>

Gender

Age

Educational Qualification

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